

EXHIBIT 3

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

In re ANADARKO PETROLEUM) Civil Action No.
CORPORATION SECURITIES) 4:20-cv-00576
LITIGATION)
_____)

VIRTUAL VIDEOCONFERENCE VIDEO-RECORDED DEPOSITION OF
PETER KELLER

Tuesday, January 17, 2023
Remotely Testifying from Hilton Head, South Carolina

Stenographically Reported By:
Hanna Kim, CLR, CSR No. 13083
Job No. 5630979

UNITED STATES DISTRICT COURT
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In re ANADARKO PETROLEUM) Civil Action No.
CORPORATION SECURITIES) 4:20-cv-00576
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Virtual videoconference video-recorded
deposition of PETER KELLER, remotely testifying from
Hilton Head, South Carolina, on Tuesday, January 17,
2023, pursuant to the stipulations of counsel
thereof, before Hanna Kim, CLR, Certified Shorthand
Reporter, No. 13083.

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1 Remotely Testifying from Hilton Head, South Carolina

2 Tuesday, January 17, 2023; 11:05 a.m., EST

3 --oOo--

4 THE VIDEOGRAPHER: Okay. And we're on the

5 record. 11:05:50

6 It's 11:05 a.m., Eastern Time, on

7 January 17th, 2023.

8 This is the deposition of Peter Keller.

9 We're here in the matter of Anadarko Petroleum

10 Corporation Securities Litigation. 11:06:05

11 I'm John Macdonell, the videographer with

12 Veritext.

13 Before the reporter swears the witness,

14 would counsel please identify themselves, beginning

15 with the noticing attorney, please. 11:06:13

16 MS. JENSEN: Good morning. Rachel Jensen

17 from Robbins Geller Rudman & Dowd on behalf of the

18 Plaintiffs.

19 And with me today are Raphael Friedman,

20 and, also, Francisco Mejia should be joining us. 11:06:27

21 MR. GRUENSTEIN: Good morning. Benjamin

22 Gruenstein of Cravath, Swaine & Moore for the

23 Defendants.

24 And with me are Lauren Phillips and

25 Chizoba Ukairo of my firm, as well as George Shipley 11:06:46

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1 of Shipley & Snell, and Kallie Gallagher of
2 Occidental.

3
4 PETER KELLER,
5 having been duly administered an oath over
6 videoconference as stipulated by all counsel, was
7 examined and testified as follows:

8
9 MS. JENSEN: Okay. Just a reminder, we'll
10 have everyone go off video, except for the -- the 11:07:23
11 taking attorney.

12
13 EXAMINATION

14 BY MS. JENSEN:

15 Q. Okay. Good morning, Mr. Keller. 11:07:30

16 A. Good morning.

17 Q. Where are you physically located today?

18 A. I'm in Hilton Head, South Caroline.

19 Q. And is anybody else in the room with you
20 today? 11:07:44

21 A. No.

22 Q. Do you have any documents in reach?

23 A. I have my expert report.

24 Q. And is that your expert report dated
25 November 9th, 2022? 11:07:52

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1 A. Yes, it -- yes, it is.

2 Q. And have you removed from reach all
3 technology not being used for purposes of this
4 deposition right now?

5 A. I have. 11:08:04

6 Q. And do you understand that you are not to
7 communicate with anyone except for myself while
8 we're on the record today?

9 A. Yes, I do.

10 Q. Okay. 11:08:13

11 Have you ever had your deposition taken
12 before?

13 A. Yes, I have.

14 Q. How many times?

15 A. Three or four times. 11:08:19

16 Q. And in what -- what occasion did you have
17 to have your deposition taken before?

18 A. As an expert in several proceedings. One
19 in Wilmington, Delaware, one in Harris County,
20 Texas. 11:08:38

21 Q. And the Harris County, Texas, case, is
22 that the SPM --

23 A. Ma'am, yes -- yes. Yes, it is.

24 Q. And what did that case concern?

25 A. It concerned a dispute between SPM, being 11:08:47

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1 multiple subsidiaries, affiliates of Schlumberger,
2 against an oil company, SM Energy.

3 Q. And on whose behalf were you retained?

4 A. I was retained on behalf of SPM,
5 Schlumberger.

11:09:13

6 Q. And what was the nature of your opinion in
7 that case, if any?

8 A. The nature of my opinion was that the
9 valuation parameters used by SM Energy were
10 incorrect to the detriment of Schlumberger and 11:09:25
11 affiliates.

12 Q. And what was the nature of the investment?

13 A. Schlumberger, as is sometimes common in
14 the industry, rather than providing services for
15 fees, provided services in exchange for ownership 11:09:44
16 interests in wells being drilled by SME.

17 Q. And what was the nature of the wells being
18 drilled in that case?

19 A. They were oil and gas wells in the
20 Dakotas. 11:10:06

21 Q. Onshore?

22 A. Onshore, yes, yep.

23 Q. What was the outcome of that case?

24 A. It was settled.

25 Q. You mentioned a case in Delaware. Was 11:10:14

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1 that the LCT Cap case, or Capital case --

2 A. Yes. Yes -- yes, it is, yep.

3 Q. Okay. And in that case, you represented
4 NGL or were retained on their behalf?

5 A. That is correct. 11:10:31

6 Q. And what was the nature of your opinion in
7 that case?

8 A. The nature -- my opinion in that case was
9 that the fees earned by LCT should have been on the
10 order of -- of a million to \$2 million versus a 11:10:43
11 claim of \$45 million.

12 Q. And specific- -- that did not involve the
13 valuation of a -- an oil and gas asset; correct?

14 A. No. It was a fee in connection with
15 acquisition of an oil and gas asset. 11:11:05

16 Q. What was the resolution of that case, if
17 there has been one?

18 A. There was a resolution with a jury trial
19 finding damages in the amount of a -- a million and
20 a half dollars for LCT, but then assessing 11:11:22
21 punitives.

22 That verdict was eventually thrown out,
23 and it is now scheduled for retrial in February of
24 2023.

25 THE COURT REPORTER: Excuse me, Counsel. 11:11:38

1 I'm going to admit somebody, Mr. Mejia.

2 MS. JENSEN: Okay.

3 BY MS. JENSEN:

4 Q. So it's going for retrial next month?

5 A. That is correct, yes. 11:11:47

6 Q. And you were retained on behalf of the
7 defense in that case?

8 A. Yes, I am.

9 Q. And I believe you said -- was there a
10 third case? 11:11:56

11 A. There -- there were several arbitrations.
12 ArcLight Capital was one. Yes.

13 Q. Is that Michael Christopher versus
14 ArcLight Capital?

15 A. That is correct, yeah. 11:12:12

16 Q. And on whose behalf were you retained in
17 that case?

18 A. On behalf of ArcLight Capital, the
19 defendant.

20 Q. And what was the nature of your opinion in 11:12:24
21 that case?

22 A. The nature of my opinion in that case was
23 that Mr. Christopher was not, in fact, entitled to
24 the damages he was seeking from ArcLight.

25 Q. And what were the damages he was seeking? 11:12:37

1 A. He had claimed that he, by virtue of
2 employment, had earned an interest in certain of the
3 properties that ArcLight had acquired or was
4 managing.

5 Q. What was the resolution of that case, if 11:12:52
6 any?

7 A. I don't know the final resolution. It was
8 settled, and I did not see the settlement documents.

9 Q. Any other depositions?

10 A. Not within the past decade, no. 11:13:10

11 Q. Did you prepare -- prepare for this
12 deposition today?

13 A. I did.

14 Q. And what did you do to prepare for the
15 deposition? 11:13:24

16 A. I re-read my report since it was issued
17 several months ago.

18 Q. Anything else?

19 A. Re-read it and, you know, kind of looked
20 at some of the attachments and supporting documents, 11:13:38
21 yes.

22 Discussed with counsel the housekeeping
23 details for today.

24 Q. So you met with counsel in preparation for
25 your deposition? 11:13:51

1 A. I did.

2 Q. For how long?

3 A. I think it was probably an hour on Friday,
4 the 13th, and about that same amount of time
5 yesterday. 11:14:02

6 Q. So you re-reviewed your dep- -- your
7 report in preparation for today. Is there anything
8 in your report that you'd like to withdraw or
9 modify?

10 A. There is not. 11:14:22

11 Q. Anything you believe to be incorrect?

12 A. No.

13 Q. So you stand by your report in its
14 entirety?

15 A. Yes, I do. 11:14:32

16 Q. Is there any further work you intend to
17 do?

18 A. I am working on some rebuttal report on
19 behalf of Cravath.

20 Q. And what is the nature of your rebuttal 11:14:47
21 report?

22 A. Rebuttal report to several of the experts
23 that Plaintiffs have retained.

24 Q. Rebuttal to whom?

25 A. Merrill, Regan, and Steinhold. 11:15:00

1 Q. So do you intend to offer opinions other
2 than what you state in your report, your November 9,
3 2022, report?

4 (Simultaneous speaking.)

5 (Interruption in audio/video.) 11:15:31

6 THE COURT REPORTER: I'm sorry, there was
7 some talking over. November?

8 BY MS. JENSEN:

9 Q. 9th, 2022, report.

10 A. I'm rebutting certain statements, but I 11:15:38
11 found the expert reports largely supported of --
12 supportive of the opinions in my November report.

13 Q. So that doesn't answer my question.

14 My question was, do you intend to offer
15 additional opinions other than what's set forth in 11:15:54
16 your November 9th, 2022 --

17 A. Yeah. Yes, I do.

18 Q. -- report?

19 A. Yes.

20 Q. And what are those opinions? 11:16:03

21 A. That report has not been finalized yet.
22 I'm still working on it.

23 Q. And so you don't know?

24 A. I -- I don't -- it's not final yet, no, I
25 don't. 11:16:12

1 Q. When were you retained in this case?

2 A. I was retained in August of 2021.

3 Q. And you used to work with Anadarko as a
4 banking client of yours; correct?

5 A. That is correct, yes. 11:16:57

6 Q. For -- for how long?

7 A. I led the oil and gas division at the Bank
8 of New York until 2014 so my -- my banking
9 relationships would have ended really around 2008
10 after BNY bought Mellon Financial. 11:17:09

11 Q. And how many years up until that point?

12 A. 2000 -- 1998 through 2007 or '08.

13 Q. So about 20 years?

14 A. No. That would be --

15 Q. I'm sorry, about ten years? 11:17:31

16 A. Yes, that's correct.

17 Q. Apologies.

18 A. No, that's fine.

19 Q. Anadarko was a large client?

20 A. They were, you know, one of -- it was a 11:17:39
21 \$7 billion portfolio I ran, so it was one of a
22 hundred clients in the portfolio.

23 Q. And where do they rank as a \$7 billion
24 portfolio in -- in your clients?

25 A. I think our typical exposure to Anadarko 11:17:53

1 was on the order of a hundred to a hundred and a
2 quarter. At the time, they purchased in 2006
3 Kerr-McGee and Western Gas, we stepped up in our
4 bridge financing of a couple hundred million dollars
5 additional, but that was paid down pretty quickly 11:18:13
6 with capital markets proceeds.

7 Q. So we may be talking about two different
8 things. Anadarko was also a -- a banking client of
9 yours; correct?

10 A. Yes. So they're -- they're typical 11:18:22
11 exposure was on the order of 100 to \$125 million in
12 a book of \$7 billion.

13 Q. So could you describe the nature of the
14 relationship with Anadarko in this time period of
15 1998 to 2008? 11:18:42

16 A. Yes. Typical commercial banking
17 relationship. We were a lender, i.e., a participant
18 in a general working capital line of credit that
19 Anadarko had. In addition, we were a capital
20 markets bank, meaning we would participate in the 11:18:58
21 sale of debt securities on their behalf. And we
22 also managed a portion of their pension fund.

23 Q. In the course of that relationship, were
24 you involved in the valuation of any of Anadarko's
25 oil and gas assets? 11:19:26

1 A. Not asset specific, if you will, but as an
2 example when they purchased Kerr-McGee, we looked at
3 the underlying asset value before we financed the
4 transaction.

5 Q. Over the course of that decade, how much 11:19:48
6 money approximately did Anadarko bring into the bank
7 as a client?

8 A. I -- I would have to look back and see. I
9 mean, it varied from year to year. Typical
10 revolving credits, you get a fee for your 11:20:06
11 commitment. So, you know, hundreds of thousand of
12 dollars a year and then a -- a bigger fee on
13 something like a bridge loan.

14 Q. Okay. Could you add all that up and give
15 me an estimate? 11:20:18

16 A. I can give you top of -- top of my head
17 estimate, if it's -- if -- if at the max it was
18 200,000 bucks a year times ten years, it would be 2
19 million bucks, but -- give or take.

20 Q. So a million dollars from Anadarko as a 11:20:37
21 client while you were at the bank?

22 A. That's generally correct, yeah.

23 Q. And -- and do you know any of the
24 individual defendants in this case?

25 A. I know two of them. 11:20:49

1 Q. And who's that?

2 A. Al Walker and Bob Gwin.

3 Q. And in what capacity do you know them?

4 A. I first met Al Walker when he was the
5 chief financial officer. So as the CFO, he would 11:21:05
6 have been a principal contact at Anadarko. He then
7 moved up to become CEO when Jim Hackett retired and
8 Bob Gwin became CFO. So I -- I dealt with them as
9 principal contacts in a banking relationship.

10 Q. And did you know either Walker or Gwin in 11:21:25
11 any other capacity?

12 A. I did not, no.

13 Q. You ever worked with Occidental before?

14 A. I have not directly worked with
15 Occidental. People -- relationship managers who 11:21:40
16 worked for me handled Occidental, but I -- I never
17 had any real contact with Oxy.

18 Q. So Occidental was also a -- a client of
19 the bank?

20 A. Yes, it was. 11:21:52

21 Q. How many hours have you spent on this
22 case?

23 A. I'm going to estimate probably 100 to
24 200 hours. I -- I don't have my sheets in front of
25 me but a significant amount of time, obviously, 11:22:19

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1 since we've gone on, since August of 2021.

2 Q. And how much time did you spend on your
3 report?

4 A. Oh, my report would be the bulk of that.

5 Q. And how much have you been paid so far by 11:22:31
6 defendants in the case?

7 A. Me personally or my firm?

8 Q. Either. Both.

9 A. My personal time is something in the order
10 of -- I'm going to guess again, \$150,000. And 11:22:49
11 associates of mine at the firm, staff support, I
12 would say roughly about the same amount.

13 Q. So you had supporting staff work with you
14 on the report?

15 A. Yes, I have had. 11:23:17

16 Q. Did you have help drafting your report?

17 A. I wrote the report. Did -- I worked on
18 edits with staff members, yes.

19 Q. Did staff write any portion of your
20 report? 11:23:36

21 A. When you say "wrote," they edited portions
22 for clarity, yes. And citations, they -- they did
23 an awful lot of the citation work.

24 Q. Beyond staff, did anybody else help you
25 edit your report? 11:23:53

1 A. I sent certain drafts to the lawyers at
2 Cravath.

3 Q. And did they edit your report?

4 A. They made some suggestions as to clarity
5 and -- and -- and chronology. 11:24:06

6 Q. So the answer is yes; correct?

7 A. Yes.

8 Q. What percentage of your work now is as a
9 testifying expert?

10 A. It fluctuates. I mean, sometimes this is 11:24:22
11 my principal work. Other times, I'm engaged in
12 other things, as strategic advisor to a number of
13 utility and power players.

14 Q. Okay. At -- at this point --

15 A. Right now, the last two weeks, this has 11:24:38
16 been -- the bulk of my time has been working on
17 this -- this case and on the NGL/LCT case.

18 Q. So currently, the bulk of your work is
19 as --

20 A. Yes. 11:24:50

21 Q. -- a testifying expert; correct?

22 A. That is -- that is correct.

23 Q. Have your opinions ever been admitted by a
24 court in a securities fraud case?

25 A. In a securities fraud case? I don't 11:25:04

1 believe so. And I'm differentiating between
2 securities fraud and damages, so...

3 Q. Are you offering any legal opinions in
4 this matter?

5 A. I am not. 11:25:26

6 Q. You're not a lawyer; correct?

7 A. I am not a lawyer; no.

8 Q. You're not a securities law expert?

9 A. I am not; no.

10 Q. And do you hold yourself out as a -- a 11:25:34
11 market efficiency expert?

12 A. Yes, I've done an awful lot of market
13 efficiency work.

14 Q. And what relevant credent- -- credentials
15 do you have to be a market efficiency expert? 11:25:48

16 A. 40 years in this industry, both as -- as
17 an institutional investment manager, where I managed
18 assets on behalf of a number of large pension funds
19 and university, college endowments and as commercial
20 banker, where I had to look at market valuations 11:26:05
21 prior to signing off on exposure -- large exposures
22 to oil and gas and utility and power companies.

23 Q. Maybe you misunderstood my question, I
24 said market efficiency expert.

25 A. Yes, yes. 11:26:19

1 Q. Okay. And so, that's the --

2 A. I think those are -- I think those are
3 intertwined.

4 (Simultaneous speaking.)

5 (Interruption in audio/video.) 11:26:25

6 THE COURT REPORTER: I'm sorry, excuse me,
7 one person at a time, please.

8 THE WITNESS: Yes, sorry.

9 BY MS. JENSEN:

10 Q. Okay. So -- so that's the relevant 11:26:27
11 experience you believe you have to be a market
12 efficiency expert?

13 A. It is.

14 Q. Do you -- are you a chartered financial
15 analyst? 11:26:40

16 A. I am not.

17 Q. Do you have an MBA?

18 A. I do not.

19 Q. And, in fact, the highest level of
20 education you have is a Bachelors degree in history, 11:26:52
21 environmental studies and economics; correct?

22 A. That is correct.

23 Q. That was 1975?

24 A. Yes.

25 Q. No postgraduate degrees? 11:27:02

1 A. No degrees.

2 Q. Do you hold any current licenses?

3 A. I do not.

4 Q. And you're not an accountant; correct?

5 A. I am not. 11:27:18

6 Q. Not an auditor?

7 A. I am not.

8 Q. Are you offering an opinion whether the
9 market for Anadarko's stock was efficient?

10 A. Yes. 11:27:43

11 Q. And that information was immediately
12 impounded into the market price?

13 A. That is my belief and opinion, yes.

14 Q. And what's the -- what's the basis for
15 that opinion? 11:27:55

16 A. The basis is looking at historical
17 movements in the stock price versus disclosures made
18 by Anadarko and other parties.

19 Q. Did you undertake an event study?

20 A. I did not. 11:28:10

21 Q. How do you define market efficiency?

22 A. I define market efficiency as a market
23 taking into account evaluation, events transpiring
24 at a company and the macro environment.

25 Q. In your report, you cite Brealey, Myers, 11:28:32

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1 and Allen; correct?

2 A. I do.

3 Q. And you're aware that after the quote that
4 you have on page -- or paragraph 19, that it goes on
5 to refer to the "strong form of market efficiency"? 11:28:46

6 A. Mm-hmm.

7 Q. And that's a definition that you use for
8 your report?

9 A. I would have to reread that to -- to know
10 how much I relied on that. 11:28:58

11 Q. Okay. Well, let's take this separately.
12 So the -- the version of market efficiency that you
13 are relying on for your report is the strong form of
14 market efficiency; correct?

15 A. Yes. 11:29:11

16 Q. Do you know what the Grossman-Stiglitz
17 Paradox is?

18 A. Not that I recall, no.

19 Q. If information was instantaneously
20 impounded into the stock price, there'd be 11:29:38
21 no make -- there'd be no way to make profits on the
22 information; correct?

23 A. On a -- a specific piece of information,
24 yes.

25 Q. And so, you're opining that Anadarko's 11:29:49

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1 stock price reflected the totality of information at
2 any point in time?

3 A. Generally speaking, yes.

4 Q. Does that include opinions?

5 A. Can you be more specific, please. 11:30:04

6 Q. Do you know the difference between a fact
7 and an opinion?

8 A. I do.

9 Q. And so, under your definition of market
10 efficiency, the -- the strong form of market 11:30:19
11 efficiency, does that include opinions?

12 A. In totality, if you're speaking of
13 opinions of, say, analysts, I think those are
14 reflected, yes.

15 Q. And what if there are conflicting 11:30:33
16 opinions?

17 A. Then one has to synthesize those opinions.

18 Q. So how do you decide which opinion is
19 reflected in the stock price?

20 A. I'm not -- as I said, you would synthesize 11:30:46
21 them. Some are material, some are irrelevant, some
22 are specifically applicable to the situation.

23 Q. And what's your methodology for -- for
24 determining which opinion, if conflicting, was
25 impounded in the stock price? 11:31:07

1 A. I'm hesitating only because when you
2 say "which opinion," there are, for instance, in
3 this case, hundreds of analysts reviewing Anadarko
4 and giving reports and opinions. So there's, you
5 know, a plethora of information out there, which an 11:31:30
6 investor has to sift through, where the market has
7 to kind of get a consensus view.

8 Q. So -- but my question is a little
9 different. So what if --

10	A. Okay.	11:31:42
----	----------	----------

11 Q. -- analysts disagree, which do you choose
12 as the -- the correct one as reflected in the stock
13 price?

14 MR. GRUENSTEIN: Objection. Form.

15 You can answer, if you understand it. 11:31:58

16 THE WITNESS: I -- I'm not sure I fully
17 understand it. I will say that obviously there are
18 lots of opinions out there. Some are relevant, some
19 are irrelevant.

20 BY MS. JENSEN: 11:32:10

21 Q. And the ones that agree with you, those
22 are the relevant ones?

23	A.	No.
----	----	-----

24 Q. So how do you choose between conflicting
25 opinions? 11:32:17

1 MR. GRUENSTEIN: Objection.

2 THE WITNESS: How do I choose between
3 conflicting opinions? I think you -- you come to
4 some sort of a consensus, if you will. There are --
5 you know, obviously it's axiomatic that in any 11:32:40
6 transaction where there is a buyer there's also a
7 seller. So clearly different people have different
8 ideas about value, current value versus future
9 value. Otherwise, a buyer could never find -- a
10 seller could never find a buyer. So it doesn't 11:32:57
11 surprise me that some analysts bullish, and some
12 analysts are bearish.

13 BY MS. JENSEN:

14 Q. And so which one is reflected in the stock
15 price at any given point? 11:33:05

16 A. Something that's in the middle would be my
17 opinion.

18 Q. And what's that based on?

19 A. What I would think a sophisticated
20 investor looks for is -- that level of granularity I 11:33:20
21 don't think is of real concern to an investor.
22 You're looking at sort of the consensus view, not
23 the granularity of what one person said at one point
24 in time.

25 Q. And so -- and you agree that analysts can 11:33:34

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1 disagree; correct?

2 A. Yes, I do.

3 Q. In your report you talk about credible
4 publicly available information being reflected in
5 the price of publicly traded stock. What is your 11:33:45
6 definition of "credible"?

7 A. SEC filings, 8-Ks, Ks and Qs, investor
8 presentations, press releases.

9 Q. And why are those credible?

10 A. Well, they're subject -- generally subject 11:34:02
11 to certain standards of disclosure of -- of honesty
12 and truthfulness in the terms of SEC filings. And
13 when I say "credible," I'm talking about, you know,
14 investor conferences, statements by significant
15 company employees as opposed to an individual stock 11:34:25
16 picker, for instance. So things that are in the
17 public domain, things that are filed with the SEC I
18 have a presumption of truthfulness.

19 Q. In a securities fraud case like this, you
20 also have a presumption of truthfulness? 11:34:39

21 A. I do.

22 Q. Is credibility a binary determination?

23 A. Can you expand, please.

24 Q. Well, it's credible or not, is that your
25 view? 11:34:55

1 A. I think different people could have
2 different opinions on the validity or credibility of
3 information.

4 Q. Is the source an important factor for
5 credibility? 11:35:15

6 A. Yes, it -- to me, it is, yes.

7 Q. And the source is a subjective
8 determination, is it not?

9 A. The credibility of the source?

10 Q. Yes. 11:35:28

11 A. I would only restate what I said before.
12 Something that's done in a public forum, a press
13 release or an SEC filing, to me is -- would be more
14 credible than what one individual stock picker says
15 he thinks something's worth. 11:35:49

16 Q. And generally, the company that -- that
17 owns the asset, would they be a more credible source
18 than commentators in the market?

19 A. It would depend on the commentator. There
20 are investment banks with very deep research teams 11:36:18
21 that do an awful lot of granular work. There are
22 other sources that are more seat of the pants. So
23 it depends on the effort and time devoted to the
24 situation.

25 Q. And the commentators that you were -- or 11:36:32

1 the investment banks that you referenced, is BofA
2 one of those commentators that you think is
3 credible?

4 A. Yes, it is.

5 Q. How about Goldman Sachs? 11:36:48

6 A. Yes, I would consider Goldman credible.

7 Q. When assessing credibility, would it be
8 important to distinguish between fact and opinion?

9 A. Yes. To me fact trump -- fact trumps
10 opinion, yes. 11:37:45

11 Q. Did you distinguish between facts and
12 opinions in your discussion of publicly available
13 information?

14 A. I believe I did.

15 Q. Can you point me to an instance in your 11:37:53
16 report where you did so?

17 A. Can I point you to a specific instance?
18 I -- if you want to guide me, fine. I -- I mean,
19 it's a 150-page report. Do I know the specific
20 situation? I -- not off the top of my head, no. 11:38:07

21 Q. So you can't name one instance in your
22 report where you distinguish between facts and
23 opinions sitting here?

24 A. There are -- there are many. Can I show
25 the ci- -- citation off the top of my head? No, I 11:38:19

1 cannot.

2 Q. So the answer is -- is no?

3 MR. GRUENSTEIN: Objection.

4 THE WITNESS: If you would like to point

5 to an example, I can -- I can -- 11:38:30

6 BY MS. JENSEN:

7 Q. No. I'm asking --

8 A. -- definitely --

9 Q. -- you -- I'm asking you to point to an
10 example. 11:38:36

11 A. I can -- I -- I can read through a
12 164-page report and find examples, if you'd like.

13 Q. Okay.

14 A. Would you like me to do --

15 Q. So sitting -- sitting here right now, even 11:38:47
16 though you just re- -- re-reviewed your report, you
17 can't point me to an instance where you
18 distinguished between facts and opinion; correct.

19 A. Can I point to a specific citation? Not
20 off the top of my head, no. 11:39:00

21 Q. In this case are you offering an opinion
22 that defendants' allegedly misleading statements
23 were not misleading to investors?

24 A. That is correct.

25 Q. And are you offering an opinion that 11:39:21

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1 defendants' alleged omissions were legally
2 immaterial?

3 A. Yes, I am.

4 Q. Are you offering a legal opinion that the
5 truth was on the market before the close of market 11:39:36
6 on May 2nd, 2020 -- '17?

7 A. I'm offering an investors's opinion, not a
8 legal opinion, as I'm not a lawyer.

9 Q. Do you believe that with your report
10 you've proven the defendants' truth-on-the-market 11:39:50
11 defense?

12 A. I do.

13 MR. GRUENSTEIN: Objection. Calls for a
14 legal conclusion.

15 BY MS. JENSEN: 11:39:59

16 Q. Are you offering an opinion that the
17 existence of defendants' fraudulent scheme was
18 publicly known before the close of market on
19 May 2nd, 2017?

20 MR. GRUENSTEIN: Objection. Assume a fact 11:40:10
21 not in evidence.

22 THE WITNESS: I dispute the notion of the
23 existence of a fraudulent scheme, yes.

24 BY MS. JENSEN:

25 Q. Are you opining that the existence of a 11:40:27

1 whistleblower complaint by Shenandoah's lead
2 reservoir engineer at Anadarko was publicly known at
3 any time during the class period?

4 A. I did not opine on the whistleblower
5 complaint. 11:40:43

6 Q. Not one way or the other; correct?

7 A. That's correct.

8 Q. And you're not opining that it was
9 publicly known during the class period; correct?

10 A. That's correct. 11:40:51

11 Q. And I take it you're not opining that
12 Anadarko's decision to suspend its appraisal of
13 Shenandoah was publicly known before the close of
14 market on May 2nd, 2017?

15 A. Can you repeat that, please. 11:41:03

16 Q. I take it you're not opining that
17 Anadarko's decision to suspend its appraisal of
18 Shenandoah was publicly known before close of market
19 on May 2nd, 2017?

20 A. I have opined that there were many risks 11:41:18
21 to moving ahead and that that was well known.

22 Q. You're not answering my question. My
23 question is: Are you opining that Anadarko's
24 decision to suspend its appraisal of Shenandoah was
25 publicly known before close of market on May 2nd, 11:41:35

1 2- -- May 2nd, 2017?

2 A. It was first disclosed as a fact by Conoco
3 in its write-off. Okay, yes, correct.

4 Q. Do you mean Anadarko? You said Conoco.

5 A. Well, Conoco announced the write-off 11:41:53
6 before Anadar- -- the day before Anadarko was
7 suspended.

8 Q. Okay. So you're saying that
9 ConocoPhillips said it -- that appraisal activities
10 were being suspended at Shenandoah before close of 11:42:02
11 market on May 2nd, 2017?

12 Is that your testimony?

13 A. That's -- that's my recollection, yes.

14 Q. That's your testimony?

15 A. That's my recollection, yes. 11:42:11

16 Q. Under oath?

17 A. Yes.

18 Q. And if that's not the case, you would be
19 incorrect; yes?

20 A. I can double check the dates. The class 11:42:21
21 period ended on May 2nd. Conoco announced the day
22 before Anadarko announced suspension that it was
23 writing off its investments in Shenandoah. So I
24 believe that's the day before. May 2nd, May 3rd.
25 I -- you know, I -- I'd have to relook. 11:42:39

1 Q. So your testimony under oath is that
2 ConocoPhillips disclosed to the market that Anadarko
3 was suspending appraisal activities at Shenandoah
4 before Anadarko did?

5 A. Conoco announced it was writing off its 11:42:56
6 investment in -- in Shenandoah. And then my
7 recollection is the next day, Anadarko announced it
8 was suspending activities at Shenandoah.

9 Q. So -- so, Mr. Keller, I'd like for you
10 just to think on the question that I'm asking. 11:43:11

11 A. Yeah.

12 Q. Focus my question and answer my question.

13 Okay. So my question is very simple. It
14 is that are you opining that the market knew
15 Anadarko was suspending appraisal activities at 11:43:23
16 Shenandoah before Anadarko disclosed that post
17 market close on May 2nd, 2017?

18 A. The market knew that a 30 percent working
19 interest owner in the field had written it off. So,
20 yes, I would say the market knew the before Anadarko 11:43:42
21 announced that Conoco had written off its investment
22 in Shenandoah.

23 Q. So your testimony is that Conoco wrote off
24 its entire Shenandoah investment before Anadarko
25 announced it was suspending appraisal activities at 11:43:54

1 Shenandoah?

2 A. It -- it -- the next day, that's correct.

3 Q. And if you're incorrect, then your opinion
4 would also be incorrect; yes?

5 MR. GRUENSTEIN: Objection. 11:44:09

6 THE WITNESS: I -- I don't think that
7 differentiation is material. It's a matter of
8 12 hours one way or the other. Conoco announced and
9 Anoco suspe- -- and Anadarko suspended.

10 BY MS. JENSEN: 11:44:27

11 Q. In this case are you offering an opinion
12 on loss causation?

13 A. Not as such, no.

14 Q. Are you offering an opinion on damages?

15 A. No. 11:44:44

16 Q. Did you receive any inside information
17 about Shenandoah during the class period from
18 Anadarko or any of the partners?

19 A. I did not, no.

20 Q. Were you an investor at Anadarko during 11:45:05
21 the class period?

22 A. I was not.

23 Q. Any other Shenandoah partner?

24 A. I was not, no.

25 Q. Did you follow Shenandoah at the time? 11:45:15

1 A. I followed developments, yes.

2 Q. And how did you do so?

3 A. Again, I ran the energy group at a large
4 bank, and so as a result I followed developments in
5 the industry. From a macro standpoint, pricing 11:45:31
6 trends, and from a development standpoint, emerging
7 trends and emerging research place [verbatim].

8 Q. And during what time frame?

9 A. During my entire period at the Bank of
10 New York. So from 1998 through of May of 2014. 11:45:48

11 Q. So you followed it through May of 2014; is
12 that right?

13 A. Well, I said during my period at the bank.
14 I continue to follow it. I -- I still do energy
15 consulting work, so I -- I continue to follow the 11:46:03
16 industry, yes.

17 Q. And how did you follow it after May of
18 2014?

19 A. I look at press releases. I follow
20 common -- I've got a screen of common stock prices 11:46:15
21 of major oil and gas companies to see developments.
22 I dial into investor calls for major oil companies.

23 Q. So were you on any earnings calls for
24 Anadarko relating --

25 A. I don't --

1 Q. -- to Shenandoah?

2 (Simultaneous speaking.)

3 (Interruption in audio/video.)

4 THE COURT REPORTER: I'm sorry --

5 THE WITNESS: I do not --

6 THE COURT REPORTER: Wait. Mr. Keller, if
7 you can wait for the full question. I didn't get
8 it, please.

9 THE WITNESS: Sure. Sorry.

10 I don't believe that I dialled into any 11:46:43
11 Anadarko earnings calls during this period, no.

12 BY MS. JENSEN:

13 Q. Anything else that you did to follow
14 Shenandoah?

15 A. I have a number of screens that give me 11:46:59
16 updates on the industry, a -- a number of investment
17 banks I get to research, and entities like S&P
18 Global which I subscribe to that I get industry
19 updates and flash briefings for major developments.

20 Q. And which briefings did you get that 11:47:24
21 related to Shenandoah?

22 A. I -- I couldn't recall any specific
23 briefing on Shenandoah. Again, it was one field in
24 a big company with multiple prospects around the
25 globe. 11:47:39

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1 Q. So you don't recall any briefings about
2 Shenandoah?

3 A. I recall knowing of the Shenandoah
4 discovery. But, again, I don't think it was ever
5 more than, you know, a percent or two of Anadarko. 11:47:51

6 So I didn't follow it on that level of
7 granularity. I just looked at, you know, are there
8 emerging trends in the deepwater Gulf that could be
9 interesting.

10 Q. Have you ever been an investor in 11:48:04
11 Anadarko?

12 A. I was many years prior to this. At the
13 Bank of New York, division heads we're not allowed
14 to own individual stocks.

15 So I -- you know, certainly from the time 11:48:18
16 I started running the energy group, I -- I had to
17 get rid of any individual stockholdings.

18 So if I had owned Anadarko, it would have
19 been before 2003 or '4.

20 Q. How about Occidental stock? 11:48:31

21 A. No, I never owned Occidental stock.

22 Q. And marathon?

23 A. Never -- Marathon was a banking client. I
24 never owned equity in them, no.

25 Q. Cobalt? 11:48:40

1 A. No.

2 Q. Your report says that you managed
3 significant investments offshore in the Gulf of
4 Mexico.

5 A. That is correct. 11:49:07

6 Q. Which -- which offshore projects --

7 A. Offshore -- Offshore Gulf of Mexico. I
8 bought a number of properties on behalf of
9 principally General Motors and various of its
10 pension plans. So there were multiple fields in 11:49:21
11 the -- in the Gulf of Mexico.

12 Q. What fields?

13 A. Off the top of my head, Chandeleur Sound,
14 which is a field we bought from --

15 THE COURT REPORTER: I'm sorry, Chandler? 11:49:37
16 I didn't hear you.

17 THE WITNESS: Chan- -- Chandeleur,
18 C-H-A-N-D-E-L-E-U-R, Sound, which is a field we
19 bought from -- from Arco on behalf of our
20 institutional clients. 11:49:43

21 Black Bay Complex, which is a field that
22 we bought from Chevron. South Bayou Field, again, a
23 Chevron acquisition. Mystic Bayou Field, also a
24 Chevron acquisition. And some blocks from W&T
25 Offshore in the Gulf of Mexico. 11:50:01

1 BY MS. JENSEN:

2 Q. Any others?

3 A. To the best of my recollection, those
4 are -- those are the significant fields. We also
5 had a lot of onshore fields for institutional 11:50:14
6 clients, but General Motors is primarily focused in
7 the offshore.

8 Q. Okay. In your own words, what was your
9 assignment in the case?

10 A. My assignment was to review the complaints 11:50:35
11 as filed and to opine on truth of the market,
12 whether information was out in the market, whether
13 disclosures by Anadarko were truthful or misleading,
14 and also to talk about the general chronology and
15 time frame of deepwater exploration. 11:51:00

16 Q. What was in the market at the time is a
17 factual ques- -- question; correct?

18 A. That is correct, yes.

19 Q. And your analysis was based on documents
20 in the record? 11:51:52

21 A. That is correct, yes.

22 Q. Okay. Mr. Keller, you should be able to
23 see what has been marked as Exhibit 505.

24 (Keller Deposition Exhibit 505 was marked
25 electronically.) 11:52:47

1 THE WITNESS: Okay. Let me call it up
2 here.

3 Open with. Okay. It's coming up now.

4 Okay. This is my report, yes.

5 BY MS. JENSEN: 11:53:25

6 Q. Okay. And specifically this is your
7 November 9th, 2022 --

8 A. That is --

9 Q. -- report?

10 THE COURT REPORTER: I'm sorry -- 11:53:33

11 THE WITNESS: That is correct.

12 THE COURT REPORTER: One at a time,
13 please.

14 THE WITNESS: Yes, my November 9th, 2022,
15 report. 11:53:43

16 BY MS. JENSEN:

17 Q. Okay. And near the end of this document
18 is Appendix B.

19 A. Yes.

20 Q. And that is all the materials that you 11:53:52
21 relied in forming your opinions; correct?

22 A. That is correct.

23 Q. And did you personally review all these
24 documents?

25 A. I believe that I did. There were a lot of 11:54:07

1 documents.

2 Q. So if a document formed the basis for your
3 opinion, you would have listed it in this appendix;
4 correct?

5 A. That was my intention. Now, whether out 11:54:26
6 of 548 documents something did not make it, but I
7 cross-referenced what I had reviewed and what was in
8 my files, so I believe this is inclusive, yes.

9 Q. And did you also cite the documents that
10 you relied on for particular opinions in the 11:54:46
11 relevant section of your report?

12 A. Yes, the report is heavily footnoted.

13 Q. In addition to the documents in Appendix
14 B, did you review any other documents?

15 A. Not that I recall, no. 11:55:01

16 Q. So you haven't read any deposition
17 transcripts in this case?

18 A. Not in formulating this report, no.

19 Q. And you didn't review any of the internal
20 communications at the company? 11:55:22

21 A. Not in formulating this report. As I
22 mentioned earlier, I'm in -- in process of working
23 on a rebuttal report.

24 Q. But you didn't review any of the internal
25 communications in forming your opinions in this 11:55:39

1 report; correct?

2 A. I believe that's correct.

3 Q. Did you review the whistleblower
4 complaint?

5 A. I did see the whistleblower complaint, 11:55:51
6 yes.

7 Q. But it's not listed in your Appendix B, so
8 you didn't consider it in forming your opinions?

9 A. I did not. I -- I retrieved that on my
10 own when I first read the Complaint. 11:56:06

11 Q. Besides looking at documents, what, if
12 any, analysis did you perform?

13 A. The documents helped inform my opinion.
14 An awful of lot what I did was based on 40-plus
15 years of personal experience in this field. 11:56:28

16 So I reviewed documents, but I also relied
17 on my own experiences as a -- as an oil and gas
18 banker and as an oil and gas investor.

19 Q. Okay. By my -- my question's a little
20 different. 11:56:38

21 Mr. Keller, it's what additional analysis,
22 if any, did you perform?

23 A. Well, I crossed the reasonableness of --
24 of various of the documents that I read. So company
25 disclosures versus company investor presentations 11:56:51

1 versus bank/analyst presentations or reports.

2 Q. You didn't perform an -- an event study;
3 correct?

4 A. I did not, no.

5 Q. You didn't perform any other economic 11:57:08
6 analysis?

7 A. I did not.

8 Q. You say in your report that you understand
9 "this report will be used, among other ways, in
10 support of Defendants' truth-on-the-market defense." 11:57:18

11 We talked about the truth-on-the-market
12 defense a little bit.

13 What are the other ways that your report
14 will be used?

15 A. I -- I believe that's it. I know that 11:57:29
16 Cravath has retained other experts in this case.

17 Q. But that's not answering my question.

18 You said "among other ways." What are the
19 "other ways" in which your report will be used?

20 A. I think truth of the market. I'm sorry, 11:57:43
21 yeah, I think that's why I was retained.

22 Q. Okay. So no other ways that your report
23 will be used, to your knowledge?

24 A. Not to my knowledge, no.

25 Q. Mr. Keller, do you agree that for an 11:58:01

1 opinion to be reliable, it needs to be the product
2 of a reliable methodology?

3 A. I do.

4 Q. And a reliable methodology that can be
5 tested? 11:58:12

6 A. I do.

7 Q. A methodology that can be replicated?

8 A. I do.

9 Q. Can you cite any peer-reviewed literature
10 that your methodology is based on? 11:58:25

11 A. Can I cite peer-review method- --
12 literature? I -- I -- not off the top of my head, I
13 cannot, no.

14 Q. Have you published any peer-reviewed
15 literature about your methodology on in this case? 11:58:47

16 A. I have not.

17 Q. Has your work in this case been subject to
18 peer reviewed?

19 A. It has been subject reviewed by colleagues
20 of mine at BRG and by the folks at Cravath. Outside 11:58:55
21 of that, no, no one else has seen this report.

22 Q. And when you're referring to BRG, you're
23 talking about the staff?

24 A. That's correct.

25 Q. The staff that helped you with citations; 11:59:09

1 correct?

2 A. More than that. I had several senior
3 staffers who -- who assisted in this assignment.

4 Q. And who's that?

5 A. Eric Ma- -- Madsen, who is a -- a managing 11:59:20
6 director of BRG in -- in Los Angeles. And Keming
7 Liang, who's a -- an M.D. in China and Los Angeles.

8 Q. Can you spell their names for the record.

9 A. Yes. Keming, K-E-M-I-N-G. Let me give
10 you the correct spelling of his last name so I don't 11:59:46
11 botch it. There are three principal people I'm
12 going to re- -- refer you to now.

13 So -- excuse me. L-I-A-N-G; K-E-M,
14 L-I-A-N-G, Keming. Eric Madsen, M-A-D-S-E-N. And
15 the third person, who's sort of intermediate staff 12:00:16
16 level, is a Caroline Iannacone, I-A-N-N-A-C-O-N-E,
17 in our New York office.

18 Q. And they're all part of your offices;
19 correct?

20 A. They all are employees of BRG, that's 12:00:38
21 correct, yes.

22 Q. Now, what tests did you perform to assure
23 yourself that your opinions were correct?

24 A. I performed multiple tests. I looked at
25 movements of Anadarko stock price and correlating 12:00:57

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1 that to movements of West Texas Intermediate Crude,
2 which is a typical metric in looking at E&P company
3 stock prices is to correlate them to underlying
4 commodity prices, which tend to be the most
5 significant driver in equity prices.

12:01:13

6 I looked at movements in the stock price
7 over time. So I graphed out Anadarko's underlying
8 equity price from 2009 through 2019. And then
9 looked at various disclosures during the period that
10 I was examining.

12:01:34

11 Q. And how did that assure yourself that your
12 opinions were correct?

13 A. Well, a couple of points. Number one,
14 the -- the graphs of APC stock price versus WTI
15 are -- are very much in sync, i.e., going down as
16 oil prices go down, going up as oil prices recover.
17 I -- I looked at many of the i-banks' analysts
18 covering Anadarko to see if there was any undue
19 concentration in assets, and -- and it -- it is my
20 belief, actually my opinion, that there was no undue
21 concentration. Anadarko had a large portfolio
22 spread around the globe. No single asset accounted
23 for a disproportionate share of the company's asset
24 base, and accordingly, a disproportionate share of
25 valuation. So to me, Anadarko performed the way one

12:01:52

12:02:12

1 would expect a large --

2 THE COURT REPORTER: I'm sorry.

3 THE WITNESS: -- diversified --

4 THE COURT REPORTER: Could you slow down?

5 THE WITNESS: -- company --

6 THE COURT REPORTER: Anadarko performed,
7 I'm sorry?

8 THE WITNESS: The -- the way one would
9 expect, the way I would expect a large diversified
10 E&P company to perform.

11 THE COURT REPORTER: I'm going to ask you
12 to slow down, please, just a little bit, sir. Thank
13 you.

14 THE WITNESS: I'm sorry. Yeah, sure.

15 BY MS. JENSEN:

16 Q. And that -- that goes to your market
17 efficiency opinion?

18 A. Yes, it does.

19 Q. Any others?

20 A. That would be a principal metric, yes. 12:02:50

21 Q. Any other tests that you performed?

22 A. As I said, looking at -- at movements if
23 they correlated with disclosures in the marketplace.

24 Q. And that relates to your market efficiency
25 opinion; correct? 12:03:10

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1 A. It relates to market efficiency and
2 overlaying that with macro analyses by various
3 investment banks or consultants. There was a Wood
4 Mac report as an example that tries to correlate
5 which large projects would be economic in the 12:03:28
6 then-prevailing oil and gas pricing environment.
7 And it was reasonably bearish in what projects would
8 go to FID in a \$50-a-barrel price environment.

9 Q. And where is that cited?

10 A. I will have to look up that citation. 12:03:46
11 I -- I -- it is cited and it's a July 2016 Wood Mac
12 report and I -- I -- I'm going to have to look at
13 the citation. I -- I -- I recall it, but I don't
14 have the exact citation at my -- at my hands.

15 Again, a number -- there were a number of 12:04:12
16 reports during this period, all of which are
17 footnoted about, you know, various banks attributing
18 value to Anadarko and to Shen specifically, you
19 know, during this time period that I've got a graph
20 which lists NAV during the time period. I think it 12:04:34
21 ranged -- Shenandoah ranged from 1 percent to
22 5 percent or something. It was never a
23 significant -- and this is a graph on page 50. It
24 was never -- never a significant component of
25 Anadarko's overall net asset value. 12:04:50

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1 Q. How -- how much value would 5 percent of
2 Anadarko's market cap equate to?

3 A. Well, Anadarko's market cap varied pretty
4 significant over this time with the oil and gas
5 prices. But obviously if it was -- if it was a -- a 12:05:08
6 couple billion dollars when it was an \$80 billion
7 market cap, it's -- it's, you know, twelfth or
8 something. If it was a couple billion dollars and
9 it was a \$15 million -- billion dollar market cap,
10 it's -- it's obviously more. 12:05:22

11 But this was never a booked asset. It was
12 always potential upside. But clearly, no oil and
13 gas asset ever has any value until an FID is made.
14 So oil on the ground has no value unless there are
15 wells drilled, a platform set, and production 12:05:37
16 commences. So this was -- by the admission of
17 essentially every analyst, this was potential
18 upside, but there were never booked reserves
19 associated with this field.

20 Q. So it's -- 12:05:51

21 A. Which is the norm.

22 Q. It's your opinion that they're -- that
23 investors ascribe zero value to Shenandoah; that's
24 your testimony?

25 A. Hard value, that is correct, it was 12:06:00

1 potential upside but unquantified. And multiple
2 statements by company executives of their period
3 said it was too early to tell. Additional wells
4 needed to be drilled. It was promising but clearly,
5 no value until you make an FID. 12:06:18

6 Q. So your opinion relies or turns on the
7 fact that in your view no investor believed
8 Shenandoah had value for Anadarko; correct?

9 A. No.

10 MR. GRUENSTEIN: Objection. 12:06:30

11 THE WITNESS: That's not correct. That's
12 not correct. There was not quantifiable value.
13 There was reason to believe there was upside
14 potential, but it was not a quantified value.

15 BY MS. JENSEN: 12:06:41

16 Q. And -- and your testimony relies on
17 investors agreeing with you; correct?

18 MR. GRUENSTEIN: Objection.

19 THE WITNESS: It is -- was the consensus
20 of the street, which is a conglomeration of 12:06:50
21 sophisticated investors. And it has been my
22 experience in I said -- as I said, 40 years in the
23 business that until you have taken certain steps to
24 meet SEC and SPEE requirements, there are no booked
25 reserves. There is no asset on the balance sheet 12:07:07

1 until certain things take place, and they never took
2 place in this case.

3 BY MS. JENSEN:

4 Q. In this case you're offering opinion about
5 what investors in Anadarko common stock understood 12:07:20
6 about Shenandoah during the class period; correct?

7 A. That is correct.

8 Q. And in forming that opinion, did you
9 survey Anadarko investors about what they
10 understood? 12:07:33

11 A. I sur- -- did -- individual investors? I
12 surveyed analysts who followed the company. And
13 I --

14 Q. Did you iss- -- issue --

15 A. -- talked to individual investors -- 12:07:38

16 THE COURT REPORTER: I'm sorry.

17 BY MS. JENSEN:

18 Q. Did you iss- -- you issued a survey to
19 analysts?

20 A. I did not issue a survey to analysts. I 12:07:47
21 reviewed analyst reports.

22 Q. Did you survey any Anadarko investors?

23 A. I did not.

24 Q. Did you talk to any Anadarko investors?

25 A. I did not. 12:07:59

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1 Q. And you're not claiming to --

2 MR. GRUENSTEIN: I don't know if when do
3 you think a good time to break will be.

4 MS. JENSEN: Yeah, so give me a few more
5 minutes. 12:08:17

6 BY MS. JENSEN:

7 Q. Mr. Keller, you don't claim to have any
8 special powers of mind reading, do you?

9 A. I wish I did. I -- no.

10 Q. You reference investors up front in 12:08:24
11 your -- well, you reference investors in your
12 report. But up front you limit that definition to
13 sophisticated and professional; correct?

14 A. Yes.

15 Q. And what is your definition of a 12:08:40
16 sophisticated investor?

17 A. It's an investor who is generally
18 knowledgeable about the way markets works and does a
19 certain level of due diligence.

20 Q. Is there any peer report -- peer-reviewed 12:08:56
21 literature that you can point me to that supports
22 your definition?

23 A. Not that I can point you to, no. This is
24 anecdotal on my experience.

25 Q. It's just anecdotal -- anecdotal; correct? 12:09:19

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1 A. That's correct, yes.

2 MS. JENSEN: Okay. We can go ahead and
3 take a quick break.

4 THE VIDEOGRAPHER: Okay. We're off the
5 record. It's 12:09 p.m. 12:09:36

6 (Short recess taken.)

7 THE VIDEOGRAPHER: We're back on the
8 record. It's 12:22 p.m.

9 BY MS. JENSEN:

10 Q. Okay. Mr. Keller, in your report you also 12:22:52
11 reference professional investors; correct?

12 A. I -- I don't recall that, but that's
13 entirely possible.

14 Q. Well, that's how you're -- that's how
15 you're defining investors for purposes of your 12:23:09
16 report; correct?

17 A. That's a little more granular than I
18 recall, but that could be correct. I -- I talk
19 about investors, sophisticated investors. I don't
20 recall using professional investors, but if you say 12:23:32
21 I did, I'm sure I did.

22 Q. So are your opinions limited to
23 sophisticated investors, then?

24 A. Not exclusively, no. I think I may have
25 used those terms interchangeably. Sophisticated -- 12:23:41

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1 I don't -- again, I don't recall using professional
2 investors. I'm not sure. That's a term of art, I
3 guess.

4 Q. So they're the same in your mind?

5 A. Professional vers- -- investors versus 12:23:49
6 sophisticated?

7 Q. Yes.

8 A. Yeah, I mean, I guess I would think a
9 professional investor is somebody whose only job is
10 investing, whereas an awful lot of us are investors 12:24:01
11 outside of our professional work. So that's the
12 distinction I would make.

13 Q. And is there a peer-reviewed definition of
14 what a professional investor is?

15 A. Not that I'm aware of, no. I'm using it 12:24:15
16 colloquially.

17 Q. Colloquially to -- to mean what, someone
18 who works full time investing?

19 A. Yeah, I -- I would -- in my mind to me, a
20 professional investor would be someone whose job is 12:24:29
21 investing, so an investment manager at a pension
22 fund, an investment manager at a company, as opposed
23 to most investors actually are -- have other jobs
24 and invest their retirement, their -- their, you
25 know, personal assets, but that's not their 12:24:41

1 principal employment.

2 Q. Okay. So all professional investors are
3 not sophisticated investors; correct?

4 A. I'd almost turn that on its head. I would
5 think -- if you use my definition of a professional 12:25:07
6 investor as someone who that's their principal job,
7 I would say those are more likely to be
8 sophisticated whereas a -- a -- a retail investor on
9 the street might be less sophisticated. So I -- I
10 would actually think the opposite. A professional 12:25:21
11 investor is likely someone who spends the bulk of
12 his or her time in the markets.

13 Q. So those collapse upon each other, then?

14 A. I'm not sure what you mean by "collapse
15 upon each other." 12:25:35

16 Q. Well, are all professional investors
17 sophisticated investors?

18 A. Yes, I -- I think that's -- that's
19 correct. I think a professional investor is more
20 likely to be sophisticated than a retail investor. 12:25:42

21 Q. Okay. So why have two different
22 categories?

23 A. You know, you raised the question. I'm
24 not sure -- I'm not sure the point of your question.

25 Q. So why have two different categories? 12:25:58

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1 A. I'm -- I -- I'm not certain. As I said, I
2 don't recall using professional investors. You say
3 I did, so I'm sure I did. But I -- I'm not sure I
4 made that distinction or intended to make that
5 distinction. 12:26:17

6 Q. So in -- in your mind, your -- your
7 analysis here is limited to sophisticated investors;
8 correct?

9 A. Yes.

10 Q. You understand that a class of Anadarko 12:26:27
11 common stock investors has been certified in this
12 case?

13 A. I do.

14 Q. And do you understand that two of the
15 Plaintiffs are class representatives? 12:26:35

16 A. I -- I do. Yes, I do.

17 Q. Which -- which Plaintiffs are class reps?

18 A. Well, the -- when I first got involved,
19 the only named Plaintiffs -- Plaintiff was the
20 Georgia Firefighters' Pension Fund. 12:26:53

21 Q. When did you get retained?

22 A. August of 2001 -- 2021. Excuse me.

23 Q. Okay. So it's your testimony that at that
24 point it was only the Georgia Firefighters involved?

25 A. Well, Georgia Firefighters -- I'm -- I'm 12:27:08

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1 not -- again, I'm not certain the class was
2 certified at that point. I know there were several
3 motions to certify the class. My -- all my files
4 list this as Georgia Firefighters' Pension Fund,
5 et al., v Anadarko and the -- and the three named 12:27:24
6 individuals.

7 So I -- I've -- I've always referred to it
8 as the Georgia Firefighters versus Anadarko case. I
9 know there were class motions later.

10 Q. So do you know who the class 12:27:36
11 representatives are in this case?

12 A. I -- not off -- I can't tell you, no.

13 Q. Are you including what the class
14 representatives understood when you talk about what
15 investors understood about Shenandoah in your 12:27:59
16 opinion?

17 A. Yes. Well, let me clarify. Initially, as
18 I said, when I first started, it was Georgia
19 Firefighters. I knew that that was a plaintiff that
20 was an institutional investor and that had asset 12:28:09
21 managers, including at least one oil and gas
22 investment manager.

23 Q. Have you ever heard of the class
24 representative Norfolk?

25 A. Can you say that -- can you spell it, 12:28:26

1 please.

2 Q. N-O-R-F-O-L-K.

3 A. Oh, like the railroad. I -- I know the
4 rail- -- I know Norfolk. I don't know -- it could
5 be Norfolk, Virginia. I -- I'm -- I'm not sure what 12:28:39
6 Norfolk it is.

7 Q. Okay. So you're not aware of any class
8 rep in this case that's Norfolk?

9 A. I'm not.

10 Q. How about Ironworkers? 12:28:52

11 A. I've seen that name. They're a union, I
12 believe.

13 Q. And what do you think Ironworkers is in
14 this case?

15 A. I believe it's a -- a -- a union of -- of 12:29:02
16 ironworkers, a trade union.

17 Q. Are all class members included in your
18 definition of investors?

19 A. I -- I can't say that because I don't --
20 as I said, I -- at least I don't recall all class 12:29:24
21 members. I knew the initial -- initial plaintiff.
22 And I'm not sure I have seen a comprehensive list of
23 all class members. I know it -- it was a broad
24 class, is my understanding.

25 Q. What percentage of the class is included 12:29:38

1 in your definition of investors?

2 A. Well, I'm assuming in -- assuming. Class
3 certification, I would think all of the class
4 members are investors or they wouldn't have been
5 certified as part of this class. That's an 12:29:53
6 assumption I'm making.

7 Q. So you're including all class members when
8 you say what investors understood?

9 A. Yes.

10 Q. Does your definition of investors include 12:30:03
11 retail investors?

12 A. It -- it could. As I said, I don't know
13 the full extent of the class.

14 Q. Sitting here, you don't know what class
15 has been certified in this case; correct? 12:30:25

16 A. I don't know the full extent of that
17 class, that's correct, yes.

18 Q. In your definition of investors, are you
19 including the class representatives' investment
20 managers? 12:30:42

21 A. Am I including them, or am I opining that
22 the investors were -- in fact, received advice and
23 counsel from the investment managers, which, as I --
24 I was formerly an institutional investment manager,
25 so I'm assuming that un- -- unless it's a 12:31:03

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1 nondiscretionary account, the investors make
2 decisions with input from the investment managers.

3 But the investment managers, unless
4 they've got discretion, don't make the final
5 decision.

12:31:17

6 Q. So is that a yes or a no?

7 A. It's I'm not certain. I don't know
8 whether these asset managers who are -- I -- I have
9 managed both discretionary and nondiscretionary
10 accounts, and there's a significant difference
11 between those two types of accounts.

12:31:33

12 Q. So you don't know whether the class
13 representatives' investment managers are included in
14 your definition of investors; is that right?

15 A. If they were discretionary accounts, I
16 would -- I would say they are. If they're
17 nondiscretionary accounts, I'd say they're not.

12:31:45

18 Q. But you don't know one way or the other;
19 correct?

20 A. I -- I don't know. Yeah, that's correct.

12:31:55

21 Q. Are you including market commentators that
22 were not investors in your definition of investors?

23 A. Are you speaking of analysts?

24 Q. Yes, among others.

25 A. Did I read -- well, let me just restate

12:32:07

1 this.

2 In general, when analysts or i-banks make
3 recommendations, usually at the end of that
4 recommendation there is a disclosure as to whether
5 or not they're currently long in the security that 12:32:25
6 they're recommending or opining on.

7 Did I in every case look at those
8 footnotes to see if the analyst or the i-bank at
9 that time was long or short or just opining, I -- I
10 did not, no. 12:32:40

11 Q. So your answer is, you don't -- you don't
12 know?

13 A. I -- I could -- I could not say
14 definitively across every one, that's correct, yes.

15 Q. So as to investors, name all the investors 12:32:47
16 that you intend to include when you say what they
17 understood about Shenandoah.

18 A. I can't name all the investors.

19 Q. Okay. Well, which -- which ones can you
20 name? 12:33:13

21 A. Well, initially the Georgia Firefighters'
22 Pension Fund, which I -- I would -- again, with --
23 with institutions, I would differentiate between the
24 institution making the investment and the underlying
25 investors, who would be, by my definition, retail 12:33:27

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1 investors.

2 So I'd expect that the underlying
3 investors would know less -- i.e. the retail
4 investors would know less than -- than the Pension
5 Fund and/or its asset manager. 12:33:39

6 Q. Okay. So you named Georgia Firefighters.

7 Any other investors that you're
8 including --

9 A. That's the name I focused on --

10 Q. -- as to what they understood? 12:33:48

11 (Simultaneous speaking.)

12 (Interruption in audio/video.)

13 THE COURT REPORTER: I'm sorry, I didn't
14 hear.

15 THE WITNESS: Excuse me. 12:33:54

16 That's the name I fo- -- focused on,
17 that's correct.

18 BY MS. JENSEN:

19 Q. Right.

20 And that -- that's the only one you -- you 12:33:57
21 can name; correct?

22 A. At this point, that's correct, yes.

23 Q. So is it your opinion that all the
24 investors that fall within your definition of
25 sophisticated agree how to interpret information 12:34:13

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1 such as an earnings release?

2 A. Do all investors? I'd say there are
3 varying levels of expertise in capability.

4 Q. Okay. So do sophisticated ex- --
5 sophisticated investors of the same levels of 12:34:34
6 expertise, do they interpret all publicly available
7 information exactly the same?

8 A. No, not exactly the same.

9 Q. So what makes you the --

10 A. There are -- 12:34:51

11 Q. -- what makes you an expert in what
12 investors understood?

13 A. Well, I have banked and invested in this
14 sector for 40 years, so I -- I -- I would say I have
15 a good understanding of what is material or -- or 12:35:01
16 what is germane to an investor and a differentiation
17 between investing in a small single asset or a
18 couple asset sort of entity and investing in a large
19 diversified entity like Anadarko where no one asset
20 is -- is a key driver of asset valuation or of 12:35:22
21 future earnings potential.

22 Q. And it's your opinion that all
23 sophisticated investors understood information about
24 Anadarko exactly the way you do?

25 A. Yes. 12:35:34

1 Q. And if a -- an investor disagrees with
2 you, are they included in the definition of a
3 sophisticated investor in your opinion?

4 A. I -- I'm certain there are investors who
5 would disagree with me. 12:35:50

6 Q. So in -- in that instance, are they
7 included in your definition for purposes of your
8 report?

9 A. Yes. There -- there can be sophisticated
10 investors who do not agree with my opinions. So the 12:35:58
11 answer's yes.

12 Q. Do you know any guidelines followed by
13 securities analysts when writing reports?

14 A. Do I know guidelines?

15 Q. Yes. 12:36:19

16 A. Yeah. I mean, I -- as I've said, I was a
17 banker for many years. I know -- I know
18 expectations about -- about -- about truth, about
19 full disclosure, about, you know, ever since SEC
20 adopted FT, the requirement to fully disclose 12:36:34
21 information and to disclose information that's
22 truthful.

23 Q. Any other guidelines?

24 A. Certainly when any investor or when I
25 personally as a banker looked at companies, one 12:36:49

1 tends to focus on significant value drivers on -- on
2 materiality. Not in the legal definition of
3 materiality, but a -- a company such as Anadarko has
4 got literally thousands of wells around the globe,
5 some of which are germane and material to an 12:37:07
6 investor.

7 But the level of granularity is not -- you
8 wouldn't analyze assets at that level of
9 granularity. It would be impossible.

10 Q. So are you aware of guidelines regarding 12:37:25
11 the -- the differentiation between fact and opinion?

12 A. Yeah. When -- when I read analyst
13 reports, they will often differentiate and say,
14 "This is my opinion" as opposed -- I mean, they'll
15 state facts and then state an opinion based on those 12:37:44
16 facts. An opinion is --

17 Q. Okay. But my question is different.
18 Are you --

19 A. Okay.

20 Q. -- aware of any guidelines for securities 12:37:48
21 analysts when writing reports with respect to
22 opinion versus fact?

23 A. Only that there's truthful disclosure.
24 Can I can cite specific guidelines, I cannot.

25 Q. But you -- sitting here right now, you 12:38:06

1 can't -- you can't cite any guideline?

2 A. That's correct. That's correct.

3 Q. It's important to distinguish between fact
4 and opinions; correct?

5 A. Absolutely. 12:38:17

6 Q. And why is that?

7 A. Everyone's entitled to their own opinion,
8 but you're not entitled to your own facts. Facts
9 are facts. They're demonstrable. They're
10 verifiable. They're consistent, if you will. 12:38:31

11 Opinions are colored by subjective --
12 subjective views.

13 Q. In your report, do you ever cite an
14 analyst's opinion as opposed to fact as evidence of
15 what investors understood? 12:38:48

16 A. Opinions are driven by facts, so an
17 analyst would look at the fact situation.

18 For -- for instance, an analyst's
19 recommendation -- typical buy/sell/hold
20 recommendations, those are opinions driven by the 12:39:00
21 underlying facts.

22 So you can and often do have various banks
23 or analysts -- one analyst having a buy on a stock,
24 somebody else having a sell, somebody else having a
25 hold. Those buy, sell, or holds are opinions that 12:39:17

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1 are based on a synthesis of the underlying facts.

2 Q. And so you cited analyst opinions as
3 opposed to fact as evidence of what investors
4 understood in your report; correct?

5 A. Both, that's correct, yes. 12:39:30

6 Q. How did you decide which analyst reports
7 to cite and which not to cite?

8 A. I -- as I've said, I think I looked at
9 something like 400 analyst opinions. I looked at
10 ones that seemed to be more specific. 12:39:44

11 I did a search based on Shenandoah because
12 an awful lot of the analyst reports I looked at were
13 higher level, didn't talk about specific assets,
14 and -- and, accordingly, were not as significant to
15 me in forming my opinions. 12:39:57

16 Some of the other analysts were
17 specifically focused on value attributable to the
18 Shenandoah Basin or the Shenandoah Field or the Gulf
19 of Mexico in general, since Anadarko had such a
20 broad range of assets. 12:40:13

21 Q. And did you include in your report
22 analysts who disagreed with your opinions?

23 A. I -- I -- I would say I did not find
24 analysts who significantly disagreed with my
25 opinions. 12:40:29

1 Over the course of this class period,
2 Anadarko made repeated observations that more work
3 needed to be done, that they weren't near FID yet.

4 And analysts, did they refine their
5 valuations, they did because that's why one drills 12:40:44
6 wells, to get information. One never drills an
7 initial well in search of a dry hole. So those
8 migrated over time, but based on the facts as
9 presented by drilling.

10 Q. So it's your -- your testimony that no 12:40:57
11 analysts disagree with the opinions in your report?

12 A. I would say that's correct, yes.

13 Q. And if you're not correct, then your
14 opinion would be wrong; right?

15 MR. GRUENSTEIN: Objection. 12:41:12

16 THE WITNESS: I don't think that's true.
17 It would depend on the specifics of the analysts
18 that you're talking about.

19 BY MS. JENSEN:

20 Q. Would you consider changing your opinion 12:41:21
21 if there was an analyst who disagreed with your
22 respective opinions?

23 A. It would be very unlikely because as I
24 mentioned at the outset, Shenandoah was never a
25 major portion of Anadarko's asset valuation. 12:41:34

1 Q. So you wouldn't change your opinion if
2 there was evidence that analysts disagreed with you?

3 A. I would say the analysts would have to
4 demonstrate to me that that disagreement was
5 significant and would -- would have driven value of 12:41:55
6 their APC stock, and I don't believe that was ever
7 the case.

8 Q. So you're saying that you would not change
9 your opinion; is that right?

10 MR. GRUENSTEIN: Objection. 12:42:07

11 THE WITNESS: I'm not aware of any
12 information that would make me change my opinion.

13 BY MS. JENSEN:

14 Q. Did you cite any sophisticated investors
15 in your report? 12:42:24

16 A. I would say the majority of the analysts
17 that I reference or that I either footnoted or
18 referenced were, in fact, sophisticated investors.
19 There was large, broadly diversified street
20 involvement in Anadarko and in the sector as a 12:42:46
21 whole.

22 Q. So are you saying that all the analysts
23 that you cited in your report were sophisticated
24 investors?

25 A. I would say that's true. 12:42:55

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1 Q. And so -- and you know for a fact that
2 they were investors; is that right?

3 A. No. I've said earlier to you, I did not
4 review the -- every footnote to every analyst report
5 to see if at the time that report was issued, the 12:43:09
6 analyst at the bank was long or short in a security.

7 Q. So sitting here, you don't know one way or
8 the other?

9 A. Some were long, and some were -- some were
10 not invested. 12:43:23

11 Q. You can't --

12 A. But can I --

13 Q. You can't name --

14 A. No, I --

15 Q. -- any sitting here? 12:43:26

16 A. No.

17 Q. So to characterize an understanding as
18 shared by investors, you needed every possible piece
19 of information to inform your decision; right?

20 A. I needed every relevant piece of 12:43:39
21 information. That's correct.

22 Q. And you already testified that you did not
23 survey investors; correct?

24 A. I did not survey investors.

25 Q. And you did not includes all the news 12:43:54

1 reports during the relevant time; correct?

2 A. When you say -- certainly I could not have
3 included all the news reports. I did a keyword
4 search for Shenandoah, for Anadarko, for Gulf of
5 Mexico. There were thousands of things that did not 12:44:12
6 reference any of those three items.

7 Q. When you say "keyword search," where did
8 you do -- or I guess across what body of documents
9 did you do such a search?

10 A. I -- I did searches in general. On the 12:44:25
11 internet my team did searches through -- through
12 typical search sites, LexisNexis and others looking
13 for hits, S&P, Moody's, looking for hits on
14 Shenandoah and Anadarko.

15 Q. Did you search Bloomberg? 12:44:42

16 A. Yes.

17 Q. And you're aware, then, that there were
18 5,000 media accounts on Bloomberg during the class
19 period about Anadarko?

20 A. 5,000 media accounts? 12:44:55

21 Q. Yeah.

22 A. I -- I -- I couldn't say whether that's
23 true or not.

24 Q. You didn't review 5,000 media accounts;
25 correct? 12:45:02

1 A. I certainly -- I certainly did not, no.

2 Q. And you'd need to review all the analyst
3 reports to inform your decision as well; correct?

4 A. I would not say all of the analyst
5 reports. That's likely a physical impossibility. 12:45:18
6 I -- I reviewed many analyst reports.

7 Q. How many?

8 A. Hundreds.

9 Q. Can you be more specific?

10 A. Not -- not without going back and looking 12:45:31
11 at notes, no.

12 Q. And you're aware --

13 A. I think my --

14 Q. You're aware that --

15 A. I'm sorry. 12:45:37

16 Q. -- there were over a thousand reports
17 during the class period?

18 A. Does not surprise me.

19 Q. But you -- you did not read all of those
20 reports; correct? 12:45:45

21 A. I did not, no.

22 Q. You reviewed reports from 30 analysts?

23 A. Give or take, yes.

24 Q. Are you aware of how many analysts were
25 covering Anadarko during the class period? 12:45:58

1 A. I'm not aware of how many. I am aware
2 that when you say "analysts," that would run the
3 gamut from people like Goldman Sachs to smaller
4 shops like Seeking Alpha that -- that are not
5 particularly either credible or have broad exposure. 12:46:15
6 So when I look at the major i-banks, they would tend
7 to have sector-specific analysts working in the oil
8 and gas business, and to me that makes them more
9 credible because they have technical experience and
10 background. 12:46:32

11 Q. So some analysts you decided were not
12 credible; correct?

13 A. Some analysts I didn't attempt to review
14 because I didn't view them as having particular
15 insights into the market, that's correct. 12:46:44

16 Q. And how did you determine whether they had
17 insights into the market?

18 A. There are certain banks that have
19 traditionally been big players in the oil and gas
20 sector. I know they have analysts who follow 12:46:57
21 companies closely. I know they have broad pools of
22 assets that they manage. And then there are small
23 boutique shops that tend to be much smaller but tend
24 to be industry focused.

25 So there have always been in Denver and in 12:47:11

1 Houston and in New York some smaller investment
2 advisors or asset managers or analysts who
3 exclusively focus on the E&P business. So it's
4 looking at credentials and looking at history.

5 Q. Okay. But you -- you decided whether 12:47:30
6 you -- you found an an- -- a particular analyst to
7 be credi- -- credible; correct?

8 A. Yeah. I -- I would say -- I would say
9 that's correct.

10 Q. Did you follow any authoritative source in 12:47:43
11 determining which analysts were credible and which
12 weren't?

13 A. I would say not an authoritative source.
14 It's based on my experience over decades in the
15 business -- 12:47:58

16 Q. So --

17 A. -- who's a good coverage, yeah.

18 Q. So -- right.

19 So and "good coverage" is a subjective
20 term; correct? 12:48:01

21 A. That is very -- definitely subjective,
22 yes.

23 Q. And are you aware that there were some
24 40-odd analysts covering Anadarko during the time?

25 A. Yes. 12:48:19

1 Q. And that -- and there were other analysts
2 that covered other Shenandoah partners?

3 A. Yes, that's correct.

4 Q. So you did not review analyst reports by
5 all the analysts that were covering Anadarko or the 12:48:33
6 partners; correct?

7 A. I'm sure I did not review every single
8 analyst report, that's correct.

9 Q. Did you review all the documents that were
10 produced by investment managers in this case? 12:48:51

11 A. I'm certain that I did not.

12 Q. Did you review all the documents produced
13 by the plaintiffs in this case?

14 A. Again, I'm quite certain I did not. I
15 reviewed documents that were presented to me by 12:49:09
16 counsel for the defendants. And my team and I
17 sourced additional documents. But I couldn't tell
18 you I reviewed everything that was in the mark- --
19 everything that was out there, no.

20 Q. And did you -- you personally search 12:49:30
21 documents in the production database in the case?

22 A. I did, yes.

23 Q. And which documents did you review in that
24 database?

25 A. To the best of my knowledge, the -- the 12:49:42

1 list in Appendix B is complete list of the documents
2 that I reviewed and relied upon. There were
3 documents that I opened and found to be not focused
4 on Anadarko or Shenandoah. It's not uncommon for
5 the big banks to issue a general industry update 12:50:02
6 that had nothing specific about Anadarko or about
7 Shenandoah. And those I did not spend any time on.

8 Q. So if a particular document didn't have
9 any specific reference to Shenandoah, it was not
10 relevant to your analysis; correct? 12:50:15

11 A. I'd only caveat that -- that by saying if
12 it listed the author's then-prevailing price deck, I
13 may have looked at Goldman's price deck for 2016
14 even though it didn't reference Anadarko or
15 Shenandoah because that would be a macro driver. 12:50:37

16 Q. Any others other than the Goldman's price
17 deck for 2016?

18 A. Well, yes. I mean, as I said, as I opened
19 documents, if I saw anything that looked germane to
20 me about the macro environment, I would look at it 12:50:52
21 even if -- even if it didn't reference Anadarko or
22 Shenandoah. In general, you know, I -- I used to
23 keep pretty close tabs on what major bank's price
24 decks were as they'd be updated quarterly or
25 semiannual. So in most cases I kind of had a sense 12:51:12

1 of what the street's emphasis on the oil and gas
2 prices was or what the NYMEX features were for --
3 for oil and gas prices going forward.

4 Q. You're -- you're referencing oil prices;
5 right? 12:51:23

6 A. Oil and gas prices, that's correct, yes.

7 Q. So for the -- the analysts, are you aware
8 that there were approximately 20,000 documents
9 totaling over 200,000 pages in this case?

10 A. It does not surprise me. 12:51:41

11 Q. You reviewed, as you said, only a few
12 hun- -- only a few hundred; correct?

13 A. That is correct, yes.

14 Q. Okay. Sitting here, can you name the
15 investment managers for the class representatives? 12:52:22

16 A. I am aware that Fidelity was an investment
17 manager. I believe Janus Henderson was an
18 investment manager. Those are the two names that
19 come to mind without going back and looking.

20 Q. Who was Fidelity an investment manager 12:52:39
21 for?

22 A. I believe Fidelity was investment manager
23 for the Georgia Firefighters' Pension Fund.

24 Q. And Georgia Firefighters is not a class
25 representative in this case; correct? 12:52:49

1 A. That, I can't answer. I thought they
2 were. They were initially. So if they were removed
3 later, it's --

4 Q. So that's your -- your testimony is that
5 Georgia Firefighters was appointed as a class 12:53:03
6 representative in this case by the Court?

7 A. They were the initial plaintiff is my
8 understanding. I don't have a list of the final
9 class representatives. So I can't answer that.

10 Q. And so besides Janus, what other 12:53:22
11 investment managers for the class representatives
12 are you aware of?

13 A. Well, I -- I -- I'd say I can't answer
14 that question since I just said -- said to you I
15 couldn't tell you the full list of class 12:53:38
16 representatives. So for me to tell who represented
17 a group, I can't identify, you know, that's
18 meaningful.

19 Q. Okay. All the opinions you intend to
20 offer in this case are set forth in your summary of 12:54:00
21 opinions in paragraph 16 of your report; correct?

22 A. That is correct, yes.

23 Q. You aren't opining that the defendants did
24 not engage in a fraudulent scheme; correct?

25 A. I'm not opining on a negative, no. My -- 12:54:22

1 my opinion is that the information that was out
2 there was not misleading. Maybe they're flip sides
3 of the same coin.

4 Q. So let's step back. The statements,
5 beyond the statements, are you opining that the 12:54:42
6 defendants did not engage in a fraudulent scheme in
7 this case?

8 A. Yes. I don't believe there was a
9 fraudulent sche- -- scheme.

10 Q. And are you opining that defendants did 12:54:52
11 not engage in any deceptive business practices?

12 A. Yes.

13 Q. As to the allegedly misleading statements,
14 are all of the statements you intend to opine on
15 included in your report? 12:55:13

16 MR. GRUENSTEIN: Objection.

17 THE WITNESS: With -- with the caveat
18 that, as I mentioned earlier, I'm in the process of
19 compiling a rebuttal report which will address other
20 issues. 12:55:33

21 BY MS. JENSEN:

22 Q. So let's just focus on your report.

23 A. Right, right.

24 Q. So the -- for purposes of your
25 November 9th, 2022, report -- 12:55:37

1 A. Yes.

2 Q. -- all of the allegedly misleading
3 statements that you opine on are contained within
4 your report; correct?

5 A. That is correct. 12:55:47

6 Q. So fair to say, then, that you're not
7 offering an opinion about the risk factor statements
8 that are alleged to be misleading?

9 A. My opinion is that the risk -- risks
10 involved in Shenandoah were fully disclosed. 12:56:08

11 Q. But that's not my question, Mr. Keller.
12 Just focus on my question.

13 So the allegedly misleading risk factor
14 statements, are you opining on that as part of your
15 report? 12:56:26

16 A. I do not believe there were risk
17 statements, that's correct -- I -- that there were
18 misleading risk statements.

19 Q. Okay. So show me in your report where you
20 address whether or not the risk factor statements 12:56:35
21 were misleading.

22 A. Without going to a specific page, after
23 every well, Anadarko clearly stated that additional
24 appraisal activity was necessary, that they were not
25 yet near a point to make an FID, that this was a 12:56:53

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1 complex reservoir, and they needed more information
2 before they could move forward.

3 So I think this is consistent throughout
4 my report that they needed to confirm the areal
5 extent of the reservoir, they couldn't proceed to 12:57:08
6 development yet. And, again, throughout the class
7 period. In 2015, I recall Anadarko disclosing that
8 they still were seeking a drill ship that had 20,000
9 psi capability. So at every well announcement,
10 there was a clear statement that they were not near 12:57:26
11 an FID and additional information had to be
12 developed before they could proceed further.

13 MS. JENSEN: Move to strike as
14 nonresponsive.

15 BY MS. JENSEN: 12:57:39

16 Q. Mr. Keller, show me in your report where
17 you address the risk factor statements.

18 A. If you want to go to my -- just flip to
19 paragraph 50, under investors understand that during
20 the appraisal process they create internal resource 12:57:58
21 estimates, that this is a process: exploration well,
22 successful move to first appraisal well, move to
23 second, third, fourth, and fifth in this case.

24 Q. Mr. Keller, I -- I'm sorry, I'm going to
25 stop you --

1 A. Okay. Okay.

2 Q. Because you're not -- you're not
3 addressing --

4 A. Okay.

5 MR. GRUENSTEIN: No, no, no.

6 BY MS. JENSEN:

7 Q. -- the question.

8 MR. GRUENSTEIN: No, no, no. You're not
9 allowed to stop him in the middle of an answer.

10 Mr. Keller, you can finish the answer. 12:58:20
11 Then Rachel can ask a question.

12 THE WITNESS: I -- I think I finished.
13 You -- go ahead.

14 BY MS. JENSEN:

15 Q. Okay. 12:58:26

16 A. Direct me a little --

17 Q. So --

18 A. -- more clearly.

19 Q. -- where in paragraph 50 do you recite the
20 risk factor statement? 12:58:33

21 A. Let me go back to paragraph 16, then.
22 "appraisal drilling is a high-risk business."

23 Q. Okay. So -- so that -- that's your --
24 that -- that's the part of your report that
25 addresses the risk factor statements during the 12:58:58

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1 class period?

2 A. It's in multiple spots. I mean, if -- if
3 you want to give me a minute, I'll -- I'll find us a
4 more specific citation. I mean, I've addressed the
5 allegations and the information provided by 12:59:12
6 Anadarko. And --

7 Q. Mr. Keller, maybe we can -- maybe we can
8 do it this way. If you address the risk factor
9 statements in your report, it would be there; right?

10 A. That's correct. 12:59:33

11 Q. Okay. So is it -- is it also fair to say
12 that you are not offering an opinion about the
13 accounting statements in this report?

14 A. I'm not an accountant, and there's a
15 separate accounting expert. 12:59:48

16 Q. And who is that?

17 A. I -- I don't know that expert. I've not
18 reviewed that person's report. I just know there's
19 a separate accounting expert.

20 Q. Okay. Turn to paragraph 154. 12:59:59

21 A. Okay. Mm-hmm, I'm there.
22 I'm at 154.

23 Q. Good. I'm getting there.

24 Okay. All right.

25 Paragraph 154, you have a list of 13:00:33

1 plaintiffs' alleged omissions here; correct?

2 A. That's correct, yes. Yes.

3 Q. And of these omissions, your report
4 addresses (g), (h), and (l); correct?

5 A. That's correct. 13:00:50

6 Q. And it does not address the other alleged
7 omissions; correct?

8 A. I believe that's correct.

9 Q. Now, you opine in your report that
10 investors understood appraisal as a high-risk 13:01:14
11 business; is that right?

12 A. That's correct.

13 Q. And what's your basis for opining that all
14 investors understood the business the same way as
15 you set forth in your report? 13:01:27

16 A. Drilling the well in almost 6,000 feet of
17 water to 31,000 feet is a well that would have been
18 unimaginable ten years ago. It is high risk because
19 the simple physics of penetrating zones miles below
20 the earth crust are significant. Anadarko had 13:01:49
21 disclosed many times that we needed advances in
22 technology. 20,000 psi blowout preventer. So,
23 again, I -- I think any investor in the oil and gas
24 business realizes that drilling is risky, ocean
25 drilling is riskier, and deepwater subsalt drilling 13:02:09

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1 is even riskier. So these, to -- to my mind, are
2 well known risks that an investor can and should
3 have been aware of.

4 Q. Now, how does a sophisticated investor
5 define high risk? 13:02:22

6 A. If you want a specific number, I mean, to
7 me, again, this is my -- my speaking something
8 that's, you know, a 10 to 15 percent probability of
9 success is high risk. And there's a gradation from
10 drilling into blanket sands where you've got a high 13:02:43
11 probability of completion and commerciality, and
12 then drilling in deepwater untested horizons such as
13 Shenandoah where there are geologic risks. They're
14 a huge capital risk because this is a, you know,
15 decade-long process, so huge risks associated with 13:02:59
16 drilling, financing, and developing. This is --
17 this is -- these are risks that to my mind are well
18 known by investors.

19 Q. So sophisticated investors believed there
20 was a 10 to 15 percent probability of success; is 13:03:12
21 that -- that right?

22 A. I'm not saying -- I -- I define that as my
23 definition of high risk. I -- I think a
24 sophisticated investor -- well, let -- let me
25 differentiate this. 13:03:25

1 None of these investors who were investing
2 in Shenandoah was not a single-asset investment.
3 They were investing in a company where Shenandoah
4 was a very small percentage of the overall company
5 prospects. 13:03:42

6 So success at Anadarko or failure was not
7 a key driver. So if this was a 10 or 20 percent
8 probability of success, it added upside and had some
9 downside risk, but this was not an asset that was
10 key to the company's valuation under any scenario. 13:03:54

11 MS. JENSEN: So, Mr. Keller, I -- I'm
12 going to move that to strike -- I'm going to move to
13 strike as unresponsive.

14 BY MS. JENSEN:

15 Q. My question was simply, so do -- so do 13:04:05
16 sophisticated investors believe there was a 10 to 15
17 percent probability of success?

18 A. I did -- I -- I will not say that. I will
19 say sophisticated investors understand that
20 deepwater subsalt drilling is a high-risk endeavor. 13:04:16

21 Q. And so no -- no percentage --

22 A. I won't put a number on that.

23 (Simultaneous speaking.)

24 (Interruption in audio/video.)

25 THE COURT REPORTER: I'm sorry.

1 THE WITNESS: No.

2 THE COURT REPORTER: Wait. One -- can we
3 slow down a little bit? I'm getting talking over.

4 BY MS. JENSEN:

5 Q. So there's no percentage that you can put 13:04:26
6 on that; right?

7 A. I would say it would vary by investor.

8 Q. And some investors have different
9 appetites for risk; isn't that right?

10 A. That's absolutely true. 13:04:45

11 Q. So some buy while others sell?

12 A. It's always the case, yes.

13 Q. You ever heard, the phrase, "high risk
14 equals high reward"?

15 A. I have. 13:04:56

16 Q. So when the risk gets high, the potential
17 reward is also high; correct?

18 A. The potential reward, that's the key,
19 potential.

20 Q. So fair to say that an investor would want 13:05:05
21 to be compensated for the high risk so the potential
22 reward is also high?

23 A. I would be a little more focused than
24 that. The investor is buying a -- a derivative
25 instrument, a common stock in a big company. I 13:05:22

1 would say the company would expect that. The hurdle
2 rate for something like this, at the company level
3 [verbatim]. And it's the company investing the
4 money would be higher. Anadarko's invested money in
5 Shenandoah. The investors are investing money in 13:05:50
6 Anadarko common stock. Those are two very different
7 sort of risk paradigms.

8 Q. And who is in a better position to assess
9 the risk, Anadarko or the investor?

10 A. Anadarko. 13:05:48

11 Q. And when it's risky, it's even important
12 to have accurate information about what those risks
13 are; correct?

14 A. Absolutely.

15 Q. And, again, the operator is in a better 13:05:57
16 position than the investors to know what those risks
17 are?

18 A. That's correct.

19 Q. Now, your report cites hurdle rates for
20 deepwater oil of 18 percent. So just using that as 13:06:10
21 a -- in a hypothetical, if Anadarko was to invest 1
22 billion, it would expect to earn at least 150
23 million to \$180 million each year in profits?

24 A. Well, it's not a straight line. Oil and
25 gas production is never a straight line. Investment 13:06:31

1 precedes revenues by as much as a decade. So it's
2 not -- the calculation's a little bit more complex
3 than that.

4 Q. But the point remains that Anadarko would
5 expect to receive a profit on that investment; 13:06:45
6 correct?

7 A. If your hurdle was 18 percent, you'd
8 assu- -- you would assume, or it's axiomatic that
9 the internal rate of return on that project is
10 18 percent, that's correct. It's not straight line, 13:07:01
11 but that is correct. The math is correct.

12 MS. JENSEN: Okay. Why don't we go ahead
13 and take a quick break.

14 THE VIDEOGRAPHER: All right. We're off
15 the record. It's 1:07 p.m. 13:07:23

16 (Short recess taken.)

17 THE VIDEOGRAPHER: We're back on the
18 record. It's 1:28 p.m.

19 BY MS. JENSEN:

20 Q. Okay. Mr. Keller, would you please turn 13:28:58
21 to page 50 of your report.

22 A. Yes, I will.

23 Yes.

24 Q. Okay. And there's a figure eight here;
25 correct? 13:29:17

1 A. That's correct.

2 Q. And the figure eight is a portion of
3 Anadarko's valuation attributed to Shenandoah; is
4 that right?

5 A. That is correct. 13:29:23

6 Q. Now, did you include all analysts and
7 investment managers who attributed a portion of
8 Anadarko's valuation to Shenandoah in this figure?

9 A. I believe I did. I know there was some
10 that attributed no value to Shenandoah. 13:29:41

11 Q. So my question is, did you include all of
12 them that attributed a portion of Anadarko's
13 valuation to Shenandoah?

14 A. All that I was aware of, that's correct.

15 Q. Now, you do have references to Credit 13:29:56
16 Suisse in your report; correct?

17 A. Yes, I do.

18 Q. And Credit Suisse also attributed a
19 portion of Anadarko's valuation to Shenandoah; is
20 that correct? 13:30:10

21 A. That -- that could be correct, yes.

22 Q. Oh.

23 A. I don't -- I don't recall.

24 Q. You also mention Capital One in your
25 report? 13:30:16

1 A. I do.

2 Q. And Capital One also attributed a portion
3 of Anadarko's valuation to Shenandoah; correct?

4 A. If -- if you say so?

5 Q. So you don't know whether this list is 13:30:27
6 complete; is that right?

7 A. It -- it is possible that there are
8 analysts that I did not capture, that's correct,
9 yes.

10 Q. Okay. Now, did you look at the investment 13:30:40
11 managers in the case to see if they attributed a
12 portion of Anadarko's valuation to Shenandoah?

13 A. As I mentioned to you, I knew that
14 Fidelity was an asset manager. I did not look
15 specifically at asset managers, no. I just looked 13:30:59
16 at the broader universe.

17 Q. Okay. And you're -- you're aware that
18 Fidelity is not an investment manager for one of the
19 class representatives; correct?

20 A. I -- I am after you told me, yes. 13:31:09

21 Q. Okay. You don't mention Sar- -- Sarasin
22 here; correct?

23 A. Not that I recall, no.

24 Q. Okay. Do you have any reason to doubt
25 that class representative Norfolk's investment 13:31:18

1 manager, Sarasin, had Shenandoah in their NAV at
2 2.28 billion or \$4 per share as of April 2 -- 2017?

3 A. If -- if you say so, I'll take your word
4 for it. I -- I don't know that.

5 Q. You have no reason to doubt that; correct? 13:31:42

6 A. No, no. I believe you're telling me the
7 truth.

8 Q. In fact, you don't mention Sarasin
9 anywhere in your report; do you?

10 A. I don't recall that I do. I don't believe 13:32:02
11 I do, no.

12 Q. And you also didn't include Lazard?

13 A. Lazard.

14 Q. Lazard, thank you.

15 A. At all or on this graph? I don't have 13:32:16
16 them on this graph, certainly.

17 Q. Do you mention them at all throughout your
18 report?

19 A. I'm very particular with Lazard, and I --
20 I can't tell you for sure whether I mention then at 13:32:29
21 all or not. They're certainly a major bank.

22 Q. And so, you do note Janus Henderson here
23 under the -- under this figure eight. And you note
24 that it "invested on the Anadarko based on its
25 overall business, not any single field." [As read] 13:32:47

1 Correct?

2 A. That's correct. That is correct.

3 Q. So Anadarko's business is confined to the
4 oil industry; correct?

5 A. Yes, it is, yeah. 13:32:56

6 Q. Yeah. So its assets are primarily oil
7 fields?

8 A. They are primarily oil and gas fields;
9 that's correct.

10 Q. And -- 13:33:03

11 A. And associated production facilities,
12 yeah.

13 Q. And one of those assets, oil fields during
14 the class period, included Shenandoah; correct?

15 A. No, one of those prospects included 13:33:14
16 Shenandoah. It was not an oil field because it was
17 not in production. It was not developed.

18 Q. It was one of the assets of the Anadarko
19 at the time; correct?

20 A. It was a prospect; that's correct. 13:33:25

21 Q. It was an asset at the time; correct?

22 A. I'm not trying to split hairs, but they
23 had capitalized costs related to Anadarko -- or
24 excuse me, related to Shenandoah. There were no
25 reserves related to Shenandoah. There were no 13:33:41

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1 facilities related to Shenandoah. There was
2 leasehold acquisition cost, G and G cost, and
3 drilling cost. So yes, an asset, yes, okay, fine.

4 Q. Now, you opine that investors did not
5 understand Anadarko's pre-class period statements as 13:34:02
6 a resource estimate for Shen; is that correct?

7 A. That is correct.

8 Q. And what is your basis for opining that
9 all investors understood the statements the same way
10 as you did? 13:34:16

11 A. Well, on two things. Number one,
12 Anadarko, as a matter of process, did not disclose
13 resource ranges. It disclosed net pay when it drove
14 wells. So it did not disclose resource ranges. And
15 in many cases throughout this long process from 2009 13:34:36
16 to 2017, various representatives made it clear that
17 they needed additional information before they could
18 proceed to develop, which is a precursor to booking
19 assets.

20 Q. So that's your basis for opining that all 13:34:55
21 investors understood the statements the same way as
22 you did?

23 A. Can you clarify that again if you would,
24 please.

25 Q. Is that -- are there any other bases for 13:35:07

1 saying that all investors understood the statements
2 the same way you did?

3 A. In totality, I would say that's true. Any
4 one individual statement could people have
5 interpreted it differently, yes, but I think the 13:35:24
6 totality of the statements is supportive of my
7 opinions.

8 Q. And you didn't survey any investors;
9 correct?

10 A. That is correct. 13:35:34

11 Q. And you didn't speak to any investors;
12 correct?

13 A. That is -- that is correct.

14 Q. Now, as part of this opinion, you say that
15 Anadarko consistently and properly disclosed 13:35:39
16 different aspects of the appraisal; is that correct?

17 A. That is correct.

18 Q. And off -- are you offering a legal
19 opinion about the sufficiency of Anadarko's
20 disclosures about Shenandoah? 13:35:53

21 A. I'm not offering a legal opinion, no.

22 Q. Does it matter what the company knew
23 internally to determine whether its public
24 statements were proper?

25 A. Does -- does it matter? 13:36:05

1 Q. Yes.

2 A. I'm not sure -- I'm not sure what your
3 question is getting at.

4 Q. You don't understand the question?

5 A. No, I don't. 13:36:15

6 Q. So -- so you're making -- let's back up
7 for a second. So earlier you testified that you did
8 not review any internal documents to form your
9 opinions; correct?

10 A. Correct. 13:36:26

11 Q. And so, you didn't review any internal
12 documents to determine what the company knew about
13 Shenandoah; correct?

14 A. That is correct.

15 Q. And so, you can't opine about whether 13:36:40
16 Anadarko properly disclosed aspects of the appraisal
17 of Shenandoah if you don't know what the company
18 knew at the time; correct?

19 A. In any appraisal, I'm interested in what
20 the company consensus view is. So I would expect 13:36:56
21 from my decades of experience that internally,
22 different engineers, geologists, geophysicists might
23 have different opinions. What's conveyed to the
24 street, what's conveyed in investor presentations or
25 earnings calls, wouldn't -- would -- would and 13:37:15

1 should be the company consensus view, which would be
2 generally the midpoint of -- of various opinions
3 within a company.

4 Q. And --

5 A. That's been my experience. 13:37:26

6 Q. And you don't know whether it was a
7 consensus review -- you don't know whether it was a
8 consensus view because you didn't return -- you
9 didn't review any of the internal documents;
10 correct? 13:37:38

11 A. I'm -- that's fine, yes. I'm -- I'm
12 assuming the statements that the company made were
13 consensus -- were -- was the company's viewpoint on
14 the then current situation, yes.

15 Q. So you're -- you're assuming that all of 13:37:47
16 the statements by the company were true and
17 accurate?

18 A. Yes, I am.

19 Q. And that's goes for all your opinions;
20 correct? 13:37:56

21 A. They were true and accurate based on the
22 information known at the time. Yes, that's correct.

23 Q. And you don't know what the company
24 actually knew because you didn't look at any -- any
25 of the internal documents; correct? 13:38:06

1 A. If the company was making public
2 statements at odds with the facts, I would suspect
3 that would be a cause for SEC action, not just a --
4 a shareholder lawsuit.

5 Q. Is it -- 13:38:24

6 A. I do not -- I have no -- no reason to
7 believe they were making misleading -- false and
8 misleading statements to the public.

9 Q. But you also have no basis to say that
10 they were true and accurate, do you? 13:38:35

11 A. I start with the assumption that public
12 statements in SEC filings are true and accurate;
13 that's correct.

14 Q. You don't just start there, you also end
15 there; correct? 13:38:53

16 A. That's correct.

17 Q. Okay. And so, Mr. Keller, is it your
18 opinion that Anadarko gave no indication of the size
19 of Shenandoah leading up to and during the class
20 period? 13:39:06

21 A. They, at several junctures, talked about
22 potential size. Although, in an ambiguous way,
23 there is a slide at an investor conference that
24 talked about about to 2 to \$4 billion opportunity,
25 but it was for the Shenandoah basin, not for the 13:39:25

1 Shenandoah field.

2 Q. Is -- is that it? That's the only --
3 that's the only reference, the size?

4 A. They talked about encouraging results, but
5 the only -- only dollar quantified estimate I recall 13:39:38
6 was that 2 to \$4 billion in an investor
7 presentation.

8 Q. And what about -- what about resource
9 size, any indication on the resource size?

10 A. They would, after the drilling of their 13:39:51
11 well, talk about net pay and talk about sand quality
12 but not reserves, per se.

13 Q. The Shenandoah 2 press release referred to
14 Shenandoah being one of Anadarko's largest oil
15 discoveries in the -- the Gulf of Mexico; correct? 13:40:06

16 A. That's correct.

17 Q. And it also referred to Shenandoah as a
18 potentially giant project; correct?

19 A. With the keyword being "potentially," yes.

20 Q. And also with the word "giant"? 13:40:23

21 A. Yes, "potentially giant," correct.

22 Q. And giant has a --

23 A. Potentially nothing.

24 (Simultaneous speaking.)

25 (Interruption in audio/video.) 13:40:31

1 THE COURT REPORTER: I'm sorry, can you
2 start your question over, please.

3 BY MS. JENSEN:

4 Q. And "giant" has a specific definition in
5 the context of the oil and gas industry; correct? 13:40:35

6 A. Giant's a relative term.

7 Q. And so, is it your testimony that a giant
8 field is a relative term?

9 A. Well, again, they didn't say "giant
10 field." They just said "potentially giant field." 13:40:53

11 Q. And a giant field has a well known
12 definition in the industry; correct?

13 A. I would say that is not correct. For a
14 small comp- -- for a small company, a field could be
15 giant to them, whereas it would not be giant to 13:41:10
16 Exxon or to Chevron or to -- to Total.

17 Q. So you've never heard of the term "giant
18 field"?

19 A. Yeah, I've heard it used many times.

20 Q. And you're aware then that giant field 13:41:23
21 refers to an oil field that has 500 MMBOE net or
22 recoverable; correct?

23 A. So I've heard that phraseology before,
24 yes.

25 Q. And that is well understood in the 13:41:35

1 industry; correct?

2 A. I -- I'd say a general parameter, yes.

3 Q. So when Anadarko used the term "giant
4 field," the market understood that Anadarko was
5 describing Shenandoah as having more than 500 13:41:53
6 million barrels of oil recoverable; correct?

7 A. No, not correct.

8 Q. Okay. And what is that based on?

9 A. So "potentially giant field." So if one
10 were to say there's 500 million barrels of oil in a 13:42:09
11 field, it doesn't mean it's necessarily producible.
12 If the costs or the timeframe or the political
13 climate were such that -- there are many large
14 fields that are never developed because they're not
15 economic. There are many smaller fields that are 13:42:27
16 developed because the economics are different. So
17 size alone does not determine whether a field is
18 developed.

19 Q. But that's not my question, Mr Keller. I
20 was asking about size. 13:42:37

21 A. Right.

22 Q. And so, is it your testimony under oath
23 that investors did not take any meaning away from
24 the term "giant field"?

25 A. To go back to your initial question, you 13:42:45

1 said "producible," I believe is what I heard you
2 say.

3 Q. Recoverable.

4 A. 500 million --

5 Q. Recoverable. 13:42:54

6 A. Recoverable. That's not the same thing.
7 500 million barrels in the ground is not 500 million
8 barrels recoverable.

9 Q. So my question is, is it your testimony
10 under oath that no investor took from Anadarko's 13:43:04
11 reference to "giant field" the meaning that it meant
12 possibly more than 500 million barrels?

13 MR. GRUENSTEIN: Objection.

14 THE WITNESS: Investors very well could
15 have interpreted that as 500 million barrels in the 13:43:25
16 ground, not necessarily recoverable, not necessarily
17 commercially producible.

18 BY MS. JENSEN:

19 Q. Well, the definition of a giant field is
20 500 MMBOE recoverable; correct? 13:43:35

21 A. I don't believe that's correct. It's
22 500 MMBOE, but again, recoverables can depend on
23 cost, it's going to depend on production, expenses,
24 it's going to depend on commodity prices. So I --

25 Q. So after 40 -- 13:43:51

1 (Simultaneous speaking.)

2 (Interruption in audio/video.)

3 THE COURT REPORTER: I'm sorry --

4 BY MS. JENSEN:

5 Q. So after 40 years in the industry, you 13:43:53
6 don't know whether a giant field means recoverable?

7 A. Well, at -- at a point in time, but that's
8 always a moving target because the key drivers of
9 economics are volumes, times costs, times commodity
10 prices. So 500 million barrels, that could be a 13:44:10
11 true statement, and it could be recoverable at a
12 \$100 price environment, and it could very well not
13 be recoverable in a \$40 price environment.

14 So could -- could it have been a true
15 statement at the point in time when it was made? 13:44:26
16 Yes, it could have been. Does that necessarily mean
17 it will be produced? It does not.

18 Q. So would you consider bank -- BofA as a
19 sophisticated investor?

20 A. I would. 13:44:43

21 Q. And do -- you have no reason to dispute
22 that BofA after the Shenandoah 2 announcement said
23 that management has taken the rare step of
24 describing Shenandoah as a potential giant, meaning
25 possibly more than 500 million barrels? 13:44:55

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1 A. I don't dispute that statement. They also
2 said additional drilling was necessary.

3 MS. JENSEN: I'm going to move to strike
4 that as -- as nonresponsive.

5 BY MS. JENSEN: 13:45:09

6 Q. So you do then understand that -- that
7 Bank of America took management statements about
8 Shenandoah as meaning Shenandoah possibly had more
9 than 500 million barrels recoverable?

10	A. Yes.	13:45:30
----	---------	----------

11 Q. Now, we talked about Sarasin earlier.
12 This is an investment manager for class
13 representative Norfolk that you mentioned nowhere in
14 your report; correct?

15	A. That is correct.	13:45:46
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16 Q. And they -- they produced documents in
17 this matter; correct?

18 A. That may be correct. I don't know. I
19 can't answer that.

20	Q. Did you review them?	13:45:54
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21 A. Not to the best of my recollection.

22 Q. And so, you have no reason to dispute then
23 that Sarasin also -- also understood from Anadarko
24 management that Shen is a giant field, which means
25 500 plus million barrels; correct?

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1 A. Yes, I believe I -- I'll take your word
2 for it.

3 Q. And do you have any reason to dispute that
4 internally at Anadarko company personnel understood
5 the term "giant" to mean 500 million barrels 13:46:43
6 recoverable?

7 A. I would -- I'd be happy to say that, yes.

8 Q. In fact, Anadarko continued to describe
9 Shenandoah as a giant during the class period;
10 correct? 13:47:06

11 A. Potentially giant with additional drilling
12 necessary.

13 Q. So it's your testimony that Anadarko
14 always said that it was only potentially a giant?

15 A. It is my opinion, and it is my testimony 13:47:19
16 that after the drilling of every well, Anadarko
17 commented that additional appraisal drilling was
18 necessary and that they were not near a final
19 investment decision.

20 MS. JENSEN: I'm going to move to strike 13:47:33
21 as unresponsive.

22 BY MS. JENSEN:

23 Q. Is it your testimony that Anadarko -- is
24 it your testimony that Anadarko only said it was
25 potentially a giant? 13:47:44

1 A. It may have used other -- other
2 adjectives, but it was not a developed field, yes.

3 Q. Well, in referencing giant, it did all --
4 not always say potential; correct?

5 A. Until a field is developed, it's always 13:47:57
6 potential. There is no production until a field is
7 developed. It doesn't matter how big the resource
8 size is, unless you spend the money, it's not
9 developed. It's not -- it's just potential.

10 Q. Just give me one second. 13:48:23

11 Okay, Mr. Keller, you should be able to
12 see what's been marked as Exhibit 506.

13 (Keller Deposition Exhibit 506 was marked
14 electronically.)

15 THE WITNESS: Okay. Bear with me. I'm 13:49:28
16 trying to navigate back. I'm stuck on 505. So let
17 me just navigate to 506.

18 MS. JENSEN: Do you need assistance?

19 THE WITNESS: I just don't want to -- I
20 don't want to go back. Let me just -- 13:49:42

21 MS. JENSEN: I think you may -- let's go
22 ahead and go off the record.

23 THE VIDEOGRAPHER: Okay. We're off the
24 record. It's 1:49 p.m.

25 (Discussion off the record.) 14:00:24

1 THE VIDEOGRAPHER: We're back on the
2 record. It's 2:01 p.m.

3 BY MS. JENSEN:

4 Q. Okay. Mr. Keller, do you see what's been
5 marked as Exhibit 506? 14:01:18

6 A. I do see this, yes.

7 Q. Okay. And for the record, this is
8 JanHen_00014482.

9 Okay. Will you scroll -- actually, before
10 you scroll, do you see the title of this document? 14:01:32

11 A. I do, yes.

12 Q. Okay. And what does this document appear
13 to be?

14 A. This appears to be a Third-Quarter
15 Operations Report dated October 27th, 2015. 14:01:41

16 Q. For Anadarko?

17 A. That is correct, yes.

18 Q. Okay. If you turn to the first page of
19 the document, after the cover page --

20 A. Yes. 14:01:56

21 Q. -- there is a heading that says
22 "Third-Quarter 2015 Highlights."

23 Do you see that?

24 A. I do.

25 Q. Okay. And do you see there is several 14:02:03

1 different subheadings, and there's a heading on the
2 right-hand side of the page that says "Creating
3 Option Value With Exploration."

4 A. I do see that.

5 Q. Do you see that? 14:02:19

6 A. Yes, I do.

7 Q. Okay. And could you read into the record
8 that paragraph.

9 A. Yes.

10 "During the quarter, Anadarko drilled a 14:02:27
11 successful appraisal well at Shenandoah in the Gulf
12 of Mexico. This well encountered more than 620 feet
13 of oil" -- "net feet of oil pay and continued to
14 progress the giant oil discovery towards
15 development." [As read] 14:02:45

16 Q. And do you have an understanding of what
17 well they're talking about?

18 A. This would be -- looking at that, I
19 believe this would be Shen 4.

20 Q. Okay. And do you see the reference to 14:02:54
21 "giant oil discovery" there?

22 A. I do, yes.

23 Q. And it doesn't say the word "potential"
24 before it, does it?

25 A. No, it does not. 14:03:08

1 Q. Okay. All right. You can put that away.

2 Now, the -- in -- in market -- or at least
3 some investors took the results of Shen 5 with its
4 500 million barrels recoverable to be of sufficient
5 commercial scale to develop; correct? 14:03:31

6 A. Some did. I would only add that Shen 5
7 took place just about the time that oil prices
8 troughed.

9 Q. Are we talking about two different things,
10 because I was talking about -- 14:03:53

11 A. Shen 5, you said.

12 Q. Oh, I -- I apologize. I misspoke. I
13 intended to say Shen 2.

14 A. Oh, Shen 2, okay, yeah. Yeah, okay.

15 Q. Okay. So you agree with that statement? 14:04:04

16 A. Yeah, I -- Shen 2 encountered over 1,000
17 feet of net pay, yeah.

18 Q. Now, turning to your opinion regarding the
19 March 4th, 2014, statement about the 2 to 4 billion
20 net opportunity, what is your basis for opining that 14:04:27
21 all investors understood that statement in the --
22 exactly the same way as you do?

23 MR. GRUENSTEIN: Objection.

24 THE WITNESS: Well, the math that
25 accompany that presentation show the field that it 14:04:42

1 was clear -- show the basis rather. It was clearly
2 the basin, not the field.

3 BY MS. JENSEN:

4 Q. You're not opining, however, that the
5 investors took no meaning about the value from that 14:04:51
6 statement with regard to Shenandoah?

7 A. It's a point in time statement.

8 Q. But that's not my -- that's not my
9 question, Mr. Value -- Mr. Keller, excuse me.

10 You're -- you're not opining that 14:05:08
11 investors took nothing away from that statement
12 about the value of Shenandoah --

13 A. I'm not opining --

14 Q. -- are you?

15 A. No, I'm not. 14:05:17

16 Q. Okay.

17 A. It was an encouraging time of the
18 development of Shenandoah.

19 Q. Now, you also opine that investors
20 understood throughout the class period that Anadarko 14:05:29
21 had not made a final decision to develop Shenandoah;
22 is that right?

23 A. That is correct.

24 Q. And so, implicit in that opinion is the
25 assumption that Anadarko had not made a final 14:05:44

1 decision whether or not to develop Shenandoah
2 throughout that same time period; correct?

3 A. That is correct.

4 Q. And if your assumption is wrong, would you
5 reconsider your opinion? 14:05:56

6 A. I don't believe my assumption's wrong.

7 Q. What if it was?

8 A. That's a hypothetical.

9 Q. And -- and so, you -- would you have the
10 same opinion even if your assumption was wrong? 14:06:07

11 A. The facts don't bear out that
12 hypothetical, I don't believe.

13 Q. Have you looked at any internal documents
14 about when Anadarko decided not to develop Shen?

15 A. I -- I've looked at their statements that 14:06:25
16 after four, they needed five and after five, they
17 needed six.

18 Q. You haven't looked at any internal
19 documents about --

20 A. No. 14:06:35

21 Q. -- their decisionmaking process?

22 A. No. No, I haven't.

23 What the market knew was that they needed
24 five, and then they needed six.

25 Q. And so, the market believed Anadarko when 14:06:43

1 it said it needed the results of Shenandoah to
2 decide whether or not to develop -- develop the
3 field; correct?

4 A. You just said Shenandoah. They needed the
5 results of five and then the results of six. That's 14:06:55
6 correct.

7 Q. So the market believed Anadarko when it
8 said it needed the results of Shenandoah 6 to decide
9 whether or not to develop the field; correct?

10 A. I believe that's correct. After five, it 14:07:07
11 said they needed six.

12 Q. And so you're taking those statements at
13 face value; correct?

14 A. I am.

15 Q. And so if the evidence showed that senior 14:07:15
16 management had decided not to develop Shenandoah
17 before the end of the class periods, then -- then
18 investors would have been mistaken in their
19 understanding; correct?

20 A. If they made a definitive decision not to 14:07:34
21 develop, I would say that's correct.

22 Q. Is it your opinion that all material
23 adverse information known by Anadarko about
24 Shenandoah during the class period was known to
25 investors? 14:07:55

1 A. I -- I could not say all.

2 Q. And you couldn't say all because you
3 haven't read any internal --

4 A. That's correct.

5 Q. -- Anadarko documents? 14:08:07

6 A. That's -- that's correct, yes.

7 Q. If Defendants have admitted in this case
8 that they didn't disclose certain adverse facts, you
9 don't have any reason to dispute that testimony, do
10 you? 14:08:20

11 A. I -- I don't -- I don't know what you're
12 ta- -- I don't know what facts you're talking about.

13 Q. So if the Defendants in their depositions
14 have admitted that they didn't disclose certain
15 adverse facts, you don't have any reason to dispute 14:08:33
16 that deposition testimony under oath, do you?

17 A. I don't have any reason to dispute it, no.
18 I have no knowledge of it, so I can't dispute it.

19 Q. Now, in your report, you cited a
20 declaration by Noah Barrett. 14:08:53

21 Do you know who he is?

22 A. I don't recall at this point in time. I
23 wrote that three months ago -- or two and a half
24 months ago.

25 Q. But you cited his declaration because you 14:09:08

1 thought he was a credible source of information?

2 A. I'm going to assume that's true. I
3 don't -- I don't recall it at this point in time.

4 Q. You -- you don't have any idea whether
5 he's a credible source or not? 14:09:21

6 A. I would be unlikely to cite someone who I
7 did not believe was credible.

8 Q. And you said earlier that you didn't find
9 some analysts cred- -- credible because they didn't
10 have enough sophistication. 14:09:38

11 Is that about right?

12 A. I don't believe I said I didn't find them
13 credible. I said I didn't rely on and didn't cite
14 certain -- I didn't cite every analyst whose report
15 I read, that's correct. 14:09:53

16 Q. But you -- you only cited sources that you
17 found credible?

18 A. That is correct.

19 Q. Okay. Mr. Keller, you should be able to
20 see what has been marked as Exhibit 507. 14:10:29

21 (Keller Deposition Exhibit 507 was marked
22 electronically.)

23 THE WITNESS: Let's see if I have better
24 luck this time.

25 All right. I got it. Yes. Okay. 14:10:46

1 BY MS. JENSEN:

2 Q. Have you seen this document before?

3 A. I'm having to look a little closer. Let
4 me zoom in. I can't read it.

5 I don't have a recollection of this 14:11:12
6 document. It's entirely possible I -- that I read
7 it. I don't recall this specific document.

8 Q. Okay. If you scroll down to the bottom of
9 the document, do you see this to be a declaration of
10 Noah Barrett that is -- 14:11:29

11 A. I do, ye- -- yes. Yeah, I see where the
12 declaration is, yes.

13 Q. Okay -- dated January 12th, 2023?

14 A. Yes.

15 Q. Okay. 14:11:37

16 A. I certainly have not seen anything from
17 January of 2023, that's correct. That was --

18 Q. Okay. Okay.

19 A. That would have been last Thursday.

20 Q. So -- and -- and sitting here, you don't 14:11:44
21 know who Noah Barrett is?

22 A. Well, I see he's an analyst at Janus.

23 Q. Okay.

24 A. But I -- yeah.

25 Q. All right. 14:11:55

1 And as an analyst at -- at Janus -- and he
2 is an analyst that you cited in your report;
3 correct?

4 A. Yeah. Yeah.

5 Q. Okay. And in his declaration here, he 14:12:05
6 states, at paragraph number 5, "Throughout the Class
7 Period, I was unaware of the existence of any
8 whistleblower complaint involving" Shenandoah --
9 "Anadarko or Shenandoah or any allegation that
10 Anadarko public disclosures misrepresented or 14:12:27
11 omitted material information about Shenandoah."

12 A. Did I read that, yes.

13 Q. You don't have any reason -- you don't
14 have any reason --

15 (Simultaneous speaking.)

16 (Interruption in audio/video.)

17 THE COURT REPORTER: I'm sorry, I didn't
18 hear what the witness said.

19 THE WITNESS: I have no reason to doubt
20 that that's what he's saying, I believe, in -- 14:12:38

21 BY MS. JENSEN:

22 Q. Right.

23 And as an analyst who is following
24 Anadarko and Shenandoah at the time, you have no
25 reason to dispute this testimony? 14:12:46

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1 A. I do not, no.

2 Q. Okay. And turning to paragraph 6, it
3 states, "During the Class Period, I do not recall
4 being aware of any allegation that fault
5 compartmentalization, small-scale faulting, tar, and 14:13:02
6 asphaltene onset pressures jeopardize commer-" --
7 "Shenandoah's commercial viability. I also do not
8 recall being aware of any allegation that
9 Shenandoah's producible resource size shrank
10 substantially with each appraisal well after 14:13:17
11 Shenandoah 2 and over" -- by over half during the
12 course of the Class Period." [As read]

13 Do you see that?

14 A. I do.

15 Q. Okay. You have no reason to dispute that 14:13:25
16 testimony?

17 A. It's his sworn testimony. I would -- I
18 believe it's truthful.

19 Q. Okay. And so you're -- you're not opining
20 that the information contained in paragraphs 5 and 6 14:13:35
21 of his declaration were known and understood by all
22 investors, are you?

23 A. No. But I am aware of Janus's declaration
24 that it was investing in Anadarko based on the
25 overall company, not on -- based on individual 14:13:52

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1 fields.

2 MS. JENSEN: I'm going to move to strike
3 as unresponsive everything after "no."

4 THE WITNESS: Fine. Fine. Okay.

5 BY MS. JENSEN: 14:14:03

6 Q. All right.

7 You also -- you can set that aside.

8 You also have an opinion about the 20-kpsi
9 technology in your report; is that right?

10 A. That's correct. 14:14:17

11 Q. Okay. Now, you -- you are not an
12 engineer; correct?

13 A. I'm not, no.

14 Q. Also not a technology expert?

15 A. Well, I've got decades of experience in 14:14:26
16 the offshore. So I'm not -- am I a degreed
17 engineer, no. Have I done an awful lot of work
18 involving oil drilling, yes, I have.

19 Q. So you -- do you hold yourself out as an
20 engineering expert? 14:14:42

21 A. No, I do not.

22 Q. Okay. Now, the 20-kpsi tech was not a
23 reason listed by Anadarko in writing off Shenandoah;
24 correct?

25 A. Not specifically, no, it was not. 14:14:57

1 Q. It -- it wasn't -- it wasn't cited as a
2 reason for writ- -- writing off Shenandoah; correct?

3 A. It was not cited as a reason.

4 Q. And -- and you didn't review any internal
5 documents to figure out why Anadarko wrote off 14:15:14
6 Shenandoah; correct?

7 A. Not internal documents, no, I did not.

8 As early as June of 2015 Anadarko had said
9 it needed 20-k technology, though. The market was
10 aware of that. 14:15:33

11 Q. That wasn't my question, Mr. Keller.

12 A. Okay. Fine. Fine.

13 Q. Okay. All right.

14 Moving to Shenandoah 3. Okay. Sorry,
15 just give -- give me a quick second here. 14:16:06

16 A. Take your time.

17 Q. Okay. All right.

18 So in your report you have a -- an
19 eight-paragraph summary discussing Anadarko's -- oh,
20 gosh, I'm sorry, hold on one second. I apologize. 14:16:37

21 A. You're fine.

22 Q. Okay. All right.

23 So you -- you spend quite a -- a bit of
24 time in your report discussing Shenandoah 3.

25 Is it your opinion that all investors 14:17:06

1 understood the information about Anadarko's
2 statements about Shenandoah 3 exactly as you
3 describe it in your summaries?

4 A. It is.

5 Q. And what is the basis for saying that all 14:17:18
6 investors understood this information exactly as you
7 did?

8 A. On -- in -- in January of 2015, shortly
9 after the well finished drilling, Conoco publicly
10 announced it was writing off Shen 3, dispensing it. 14:17:38

11 Q. And that's -- and so do you take from that
12 that all investors understood that Shenandoah 3 was
13 a dry hole?

14 A. Yes.

15 Q. Okay. And so is it your testimony that 14:18:00
16 all sophisticated investors understood Shenandoah 3
17 was a dry hole?

18 A. I would say all sophisticated investors
19 that cared to look at the details knew it was a dry
20 hole. 14:18:19

21 Were there investors who didn't focus on
22 Shenandoah for a period of time, that's potentially
23 true, yeah.

24 Q. Okay. So --

25 A. The market knew this was a dry hole. 14:18:28

1 Q. And you -- you --

2 A. Did every --

3 Q. -- you agree that it's not --

4 A. Go ahead. I'm sorry.

5 Q. You agree that some sophisticated 14:18:30
6 investors did not understand Shen 3 to be a dry
7 hole; correct?

8 A. Given that this was one well in one
9 prospect, are there investors who didn't focus on
10 Shenandoah, that is entirely possible. 14:18:47

11 Q. Okay. So you're saying that for a
12 sophisticated investor to disagree with you meant
13 they weren't paying attention?

14 A. The news was in the market. It had been
15 publicly disclosed by a 30 percent working interest 14:18:57
16 owner of the well.

17 THE COURT REPORTER: I'm sorry. "It had
18 been disclosed by a 30 percent" what?

19 THE WITNESS: Working interest owner of
20 the well, that being ConocoPhillips. 14:19:04

21 BY MS. JENSEN:

22 Q. Did you find any evidence that
23 sophisticated investors did not understand it this
24 way?

25 A. I did not. 14:19:24

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1 Q. And you -- you say that you looked at
2 Goldman Sachs' reports; correct?

3 A. I looked at a number of reports, yes.

4 Q. Okay. You should be able to see what has
5 been marked as Exhibit 508. 14:20:38

6 A. Okay. Let me go back.

7 (Keller Deposition Exhibit 508 was marked
8 electronically.)

9 BY MS. JENSEN:

10 Q. And, for the record, this is a Bates stamp 14:20:42
11 document with the Bates starting GS-002754.

12 A. I've got to go back in. It didn't --
13 didn't pop up as 508. Let me reload.

14 There we go, 508.

15 Okay. This is a Goldman research report 14:21:06
16 dated February 5th of 2017; is that corr- -- yeah,
17 '17, yes.

18 Yes, I've got it.

19 Q. Okay. And Goldman Sachs is a source that
20 you cite in your report; correct? 14:21:30

21 A. That is correct.

22 Q. Okay. And, in fact, you cite this very
23 report in your --

24 A. I do. Yes, I do.

25 Q. Okay. Will you turn to page 15? 14:21:39

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1 A. Bear with me. It's refreshing. Hold on.

2 Okay. I'm at page 15 now, yes.

3 Q. Okay. So would you read the second bullet
4 there?

5 A. The second bullet. You want me to read 14:22:10
6 it?

7 Q. Yeah.

8 A. I mean out loud?

9 Q. Yeah.

10 A. Okay. Yeah. 14:22:23

11 "2Q 2014: The Shenandoah #3 appraisal
12 well and evaluated the same well-developed reservoir
13 sands" that -- "1500" -- "sands 1500 feet down-dip
14 and 2.3 miles east of the first appraisal well.
15 This well found an expanded geologic reservoir 14:22:40
16 section, confirmed excellent reservoir qualities,
17 delineated the potential oil-water contacts of the
18 field. The Shenandoah #3 appraisal well found 490
19 feet of net pay." [As read]

20 Q. Okay. So -- and you cite this very report 14:23:00
21 in your report as evidence of what investors
22 understood about Shenandoah; correct?

23 A. I do. The net pay is -- is an error by
24 Goldman.

25 Q. So it's fair to say that not all investors 14:23:13

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1 understood Shenan 3 a -- Shenandoah 3 was a dry
2 hole; correct?

3 A. This -- this is in 2017. So this is after
4 4, 5, and 6 were drilled. This -- this is simply --
5 well, no, no. Excuse me. Excuse me. 14:23:35

6 Some of the confusion here results from
7 calling -- like the Number -- some people call the
8 Number 1 appraisal well, which it was -- the first
9 well is a discovery -- Number 1 appraisal well as
10 Shen 2. 14:23:57

11 I think the confusion here is Shen 3 --
12 it's the third appraisal well, but it's Shen 4.
13 Yeah, Shen 3 encountered no net pay.

14 Q. Okay. But that's not --

15 A. The company never said it encountered net 14:24:09
16 pay.

17 Q. Okay. But you'll agree that some
18 investors --

19 A. Goldman sa- -- Goldman says that --
20 (Simultaneous speaking.) 14:24:21

21 (Interruption in audio/video.)

22 THE COURT REPORTER: I'm sorry --

23 THE WITNESS: -- that's correct.

24 THE COURT REPORTER: -- I can't -- one
25 person at a time, please. 14:24:21

1 THE WITNESS: I will agree, yes.

2 BY MS. JENSEN:

3 Q. Okay. I think it got garbled, Mr. Keller;
4 so, unfortunately, we have to repeat this.

5 So you'll agree that -- that some 14:24:31
6 investors understood Shenandoah did encounter
7 hydrocarbons; correct?

8 MR. GRUENSTEIN: Objection.

9 THE WITNESS: I would agree that the
10 Goldman report says this, but it's an error. And, 14:24:44
11 in fact, well before this report was -- was
12 released, parties had disclosed that this was a dry
13 hole or that this was -- was not productive or not
14 producing.

15 MS. JENSEN: I'm going to move to strike 14:25:02
16 everything after "this."

17 THE WITNESS: Okay. Okay. Fine.

18 BY MS. JENSEN:

19 Q. Okay. Goldman Sachs wasn't the only one;
20 correct? 14:25:19

21 A. The only one attributing net pay to 3?

22 Q. Yeah.

23 A. I don't recall whether -- people
24 attributing net pay to 3.

25 Q. Jefferies did; correct? 14:25:32

1 A. If you say so. I'm saying I don't recall
2 that.

3 Q. Okay. Lazard did?

4 A. Again, I'll take your word for it even
5 though a 30 percent working interest owner had 14:25:43
6 written off the well.

7 Q. Lazard is a sophisticated investor;
8 correct?

9 A. They are indeed.

10 Q. So as part of its announcement about 14:26:07
11 Shen 3, Anadarko did not describe it as a dry hole,
12 did they?

13 A. That is correct, they did not.

14 Q. Instead, Shenandoah -- I mean, instead,
15 Anadarko described Shenandoah 3 as finding 14:26:25
16 50 percent more of the same sands?

17 A. It did.

18 Q. And also said that pressure data confirmed
19 the oil-water contacts across the field?

20 A. Yes, it did. 14:26:35

21 Q. Now, you referenced earlier
22 ConocoPhillips' accounting decision with respect to
23 Shen 3.

24 ConocoPhillips wasn't the operator of
25 Shenandoah; right? 14:26:59

1 A. That is correct.

2 Q. Anadarko was?

3 A. That is correct.

4 Q. As the operator, Anadarko had more control

5 over the appraisal process; correct? 14:27:06

6 A. That is correct, yes.

7 Q. And as the operator, investors tended to

8 listen more to Anadarko than the passive partners?

9 A. I would say that depends.

10 Q. Well, you found evidence of that, didn't 14:27:32

11 you, in the record?

12 A. Would -- yes, I do. And I would also not

13 characterize Conoco as a passive partner.

14 Q. It was not the operator; correct?

15 A. There's a difference. 14:27:54

16 Q. Okay. But you're agreeing it's not the

17 operator?

18 A. It's certainly not the operator, yes.

19 Q. And do you agree that each Shenandoah

20 partner made independent accounting determinations 14:28:04

21 with respect to the various Shen wells?

22 A. Yes, I do.

23 Q. Okay. So Anadarko investors wouldn't

24 necessarily credit ConocoPhillips' accounting

25 decisions for Anadarko information; correct? 14:28:20

1 A. That is correct.

2 Q. Anadarko also did not say that the
3 resource size reduced with the results of Shenandoah
4 3, did it?

5 A. It did not. It also did not attribute any 14:28:37
6 net pay to 3.

7 MS. JENSEN: Strike after "It did not."

8 BY MS. JENSEN:

9 Q. And certainly didn't disclose that Shen 3
10 reduced the size of the prospect by 50 to -- sorry, 14:28:51
11 25 to 50 percent; correct?

12 A. It said additional drilling was necessary.

13 Q. In answer to my question, did it disclose
14 that Shenandoah --

15 A. It did not, no. 14:29:03

16 Q. Thank you.

17 Now, in your report you opine that
18 investors understood the results of Shenandoah 3
19 resulted in a smaller resource; correct?

20 A. Yes. 14:29:38

21 Q. And what is your basis for saying that all
22 investors understood the results of Shen 3 the same
23 exact way that you interpreted that information?

24 A. Shen 3 was drilled to test the areal
25 extent of the reservoir. It was the far eastern 14:29:53

1 side of the -- of the field, and it did not
2 encounter any net pay.

3 Q. My question's a little different.

4 What's the basis for saying all investors
5 understood the information the same exact way you 14:30:06
6 did?

7 A. Because you had a fourth data point that
8 showed no reservoir --

9 MR. GRUENSTEIN: Objection.

10 (Simultaneous speaking.) 14:30:16

11 (Interruption in audio/video.)

12 THE COURT REPORTER: I'm sorry, one
13 second. Because you had a what?

14 THE WITNESS: -- a fourth data point, i.e.
15 Shen 3, that showed no net pay on the eastern flank 14:30:21
16 of the field.

17 BY MS. JENSEN:

18 Q. And if there was evidence that investors
19 thought differently than you did, would you change
20 your opinion? 14:30:31

21 A. The facts are the facts, and there was, in
22 fact, no net pay in Shen 3. So I'm not sure what
23 you're telling me investors could tell me.

24 Q. So it doesn't matter what I put in front
25 of you, you're not going to change your opinion? 14:30:47

1 MR. GRUENSTEIN: Objection.

2 THE WITNESS: The facts are there was no
3 net pay at Shen 3.

4 BY MS. JENSEN:

5 Q. And as we just saw, some investors thought 14:30:54
6 there was; correct?

7 A. Some --

8 MR. GRUENSTEIN: Objection.

9 THE WITNESS: -- investors in a report
10 written well after 4 and 5 were drilled misstated 14:31:04
11 something. This is a '17 report from Goldman, which
12 was -- would have been after Shen 4 or 5 and 6 were
13 drilled. So, again, I'm not sure of the relevance
14 of it.

15 BY MS. JENSEN: 14:31:18

16 Q. So if investors thought that, with the
17 results of Shenandoah 3, Shenandoah got bigger,
18 would that change your opinion?

19 A. There would be no basis to think that.

20 Q. And so -- so it wouldn't change your 14:31:32
21 opinion?

22 A. You -- you couldn't present me a fact
23 situation that supported that.

24 Q. Okay. Now, BofA, again, is a -- a source
25 that you cite throughout your report; correct? 14:31:46

1 A. Yes, a large bank.

2 Q. And a credible source?

3 A. In general, yes.

4 Q. A sophisticated investor; correct?

5 A. Yes. 14:32:00

6 Q. Okay. You should be able to see what's
7 been marked as Exhibit 509.

8 (Keller Deposition Exhibit 509 was marked
9 electronically.)

10 THE WITNESS: Okay. Hold on one second. 14:33:00

11 Oops, one moment.

12 BY MS. JENSEN:

13 Q. And while you're pulling that up, for the
14 record --

15 A. I have 509. 14:33:30

16 Q. -- this is B- -- this is a -- a document
17 bearing the Bates stamp BOFAS_APC-000488.

18 A. I've got it now, yes.

19 Q. Okay. Is this one of the documents that
20 you reviewed in -- in forming your opinions? 14:33:44

21 A. I did review this document to the best of
22 my recollection, yeah.

23 Q. Okay. If you'd turn to page 4.

24 A. Okay.

25 Q. There's a series of bullets. 14:33:55

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1 A. I'm sorry. Going there.

2 Okay. There we go. Got you.

3 Q. So the fifth bullet down --

4 A. Yes.

5 Q. -- do you see the heading "Shenandoah gets 14:34:09
6 bigger"?

7 A. I do see that, yes.

8 Q. And this is dated February 3rd, 2015;
9 correct?

10 A. Yes. Yes. 14:34:18

11 Q. And so this is right after the results of
12 Shen 3 are announced?

13 A. That's correct.

14 Q. And -- and Bank of America, Merrill Lynch,
15 its highlight here is that "Shenandoah gets bigger"; 14:34:31
16 right?

17 A. I do see that, yes.

18 Q. And you left this one out of your report;
19 correct?

20 A. I don't think I cited this; but, again, 14:34:38
21 unlike any other well, there was no discussion by
22 Anadarko of net pay at Shen 3.

23 THE COURT REPORTER: I'm sorry.

24 There's -- wait, wait, wait. Please slow down.

25 Unlike -- 14:34:43

1 THE WITNESS: No discussion of -- I'm
2 sorry. No discussion of net pay at Shen 3.

3 BY MS. JENSEN:

4 Q. So when you say that investors understood
5 Shenandoah got smaller as a result of Shen 3, 14:34:57
6 apparently you did not include Bank of America,
7 Merrill Lynch, in that opinion; is that correct?

8 MR. GRUENSTEIN: Objection.

9 THE WITNESS: I certainly didn't include
10 this quote, that's correct. 14:35:11

11 BY MS. JENSEN:

12 Q. Are you aware that the company failed to
13 write off Shenandoah 3 at the time because its own
14 accounting department thought that Shenandoah 3
15 increased the resource size? 14:35:26

16 A. I am aware of that, yes, I am.

17 Q. And did you review those documents in
18 forming your opinions?

19 A. I --

20 MR. GRUENSTEIN: Objection. 14:35:33

21 THE WITNESS: I'm not sure which document
22 you're talking about. I am aware that Conoco
23 expensed and Anadarko did not.

24 BY MS. JENSEN:

25 Q. But my question was different. 14:35:39

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1 Are you aware that the company failed to
2 write off Shenandoah because its own accounting
3 department thought that Shenandoah increased the
4 resource size?

A. Different people have different interpretations.

7 Q. And so do you think that Shenandoah --
8 Anadarko's accounting department was unreasonable or
9 not credible in its interpretation of the
10 announcement of Shenandoah 3? 14:36:07

11 MR. GRUENSTEIN: Objection. Foundation.

12 THE WITNESS: Yeah, I have no basis to --
13 to -- to answer that.

14 BY MS. JENSEN:

15	Q. You didn't review those documents?	14:36:19
----	---------------------------------------	----------

16 A. Not to the best of my recollection, no.

17 Q. So you really -- you have no idea, one way
18 or the other?

19 MR. GRUENSTEIN: Objection.

20 THE WITNESS: I know what the public 14:36:30
21 disclosures were, which is distinct from what
22 internal discussions may have taken place.

23 MR. GRUENSTEIN: Rachel, if there's a good
24 point to take a five-minute break --

25 MS. JENSEN: Yep, we can go ahead and take 14:37:02

1 a five-minute break.

2 THE VIDEOGRAPHER: Go off the record?

3 Okay. Off the record; it's 2:37 p.m.

4 (Short recess taken.)

5 THE VIDEOGRAPHER: We're back on the 14:50:40
6 record. It's 12- -- 2:51 p.m.

7 BY MS. JENSEN:

8 Q. Okay. Mr. Keller, earlier in your
9 testimony you mentioned two staffers who worked with
10 you to check cites and so forth in your complaint. 14:51:18
11 That's Eric Madsen and Keming Liang?

12 A. Yes.

13 Q. Okay. And both of those worked at Compass
14 Lexicon; correct?

15 A. Before they joined BRG, that's correct, 14:51:35
16 yes.

17 Q. All right.

18 And Compass Lexicon is the same company
19 where Defendants' expert Dr. Allen Ferrell works;
20 correct? 14:51:41

21 A. I believe that's correct, yes.

22 Q. Okay. So in your report, you opined that
23 investors understood after Shen 3 Anadarko needed to
24 drill additional appraisal wells to understand the
25 Shenandoah resource potential; correct? 14:52:14

1 A. Yes.

2 Q. And what's the basis for saying all
3 investors understood this, the same way that you
4 interpreted the information?

5 A. Again, I -- I would not say "all 14:52:26
6 investors." I would say the market understood it
7 based on repeated public comments by Anadarko
8 management.

9 Q. So you're conceding that not all investors
10 understood the information that way; correct? 14:52:38

11 A. I could never make a statement about all
12 investors, that's correct. I'm talking about the
13 market, what the market knew.

14 Q. Okay. And you're not saying that all
15 sophisticated investors understood the -- the -- 14:52:51
16 that the same way you did?

17 A. Again, I would not use the word "all,"
18 that's correct.

19 Q. So -- I mean, because you -- you -- it
20 would be speculation on your part to opine on what 14:52:59
21 investors understood about Shenandoah through the
22 class period; correct?

23 A. Yes.

24 Q. Now, did you -- in -- in reaching this
25 opinion, did you review any internal documents to 14:53:17

1 confirm that this is what Anadarko and the partners
2 actually thought at the time?

3 A. I -- I did not. Having been in this
4 business a long time, the partners signed AFEs and
5 committed funds, so I'm making the assumption they 14:53:38
6 were in agreement with the operator --

7 Q. So your opinion --

8 A. -- or they would have gone non-consent.

9 Q. So an assumption in your opinion is that
10 that is what actually -- what Anadarko and the 14:53:49
11 partners actually thought at the time; correct?

12 A. They did not go nonconsent, that's
13 correct?

14 Q. And are -- are you aware that
15 ConocoPhillip [verbatim] was trying to sell its 14:54:01
16 interests after Shenandoah 3?

17 A. That's a normal part of portfolio
18 optimization. It does not surprise me at all.

19 Q. But my question is different.

20 Are you aware of that fact? 14:54:14

21 A. I am not certain that I was aware of that
22 fact. I was aware Conoco was reevaluating strategic
23 priorities.

24 Q. Okay. So -- but you'll agree with me you
25 have no basis to dispute that ConocoPhillips was 14:54:26

1 starting to --

2 A. I have no basis, that's --

3 (Simultaneous speaking.)

4 (Interruption in audio/video.)

5 THE COURT REPORTER: I'm sorry -- 14:54:33

6 THE WITNESS: -- that's correct.

7 BY MS. JENSEN:

8 Q. Okay. Yeah, just wait until I finish my
9 question. I know it's --

10 A. I'm sorry. 14:54:36

11 Q. No, it's -- it's okay. It's not always
12 easy to know when I'm done with my question, so I
13 give you that. But just -- yeah, we'll try to stay
14 out of each other's way.

15 A. Yep. 14:54:47

16 Q. So let me just ask it again so that the
17 record is clear.

18 So you have no reason to dispute that
19 after Shenandoah 3, ConocoPhillips was trying to
20 sell its interests in Shenandoah? 14:54:58

21 A. Was exploring the possibility, I would
22 agree, yes.

23 Q. Okay. And so if it was trying to sell its
24 interests, then you don't know that She- -- that
25 ConocoPhillips needed additional wells to understand 14:55:12

1 the resource potential?

2 A. I do know that ConocoPhillips did not go
3 nonconsent on 4, 5, or 6.

4 Q. But that's not my question. And,
5 actually, I'm not sure that's a correct statement 14:55:27
6 either.

7 But if ConocoPhillips was trying to get
8 out of Shenandoah, then you have no reason to be- --
9 to believe that ConocoPhillips thought it needed to
10 drill additional appraisal wells to understand the 14:55:41
11 resource potential?

12 MR. GRUENSTEIN: Objection.

13 THE WITNESS: I don't agree with the
14 characterization "trying to get out of."

15 BY MS. JENSEN: 14:55:49

16 Q. Okay. Okay. But have you reviewed any
17 internal documents from ConocoPhillips about --

18 A. I have not.

19 Q. -- what it was trying to do?

20 A. No. 14:55:58

21 Q. Okay. So just assume for purposes of this
22 question that ConocoPhillips was exploring how to
23 exit from Shenandoah after Shenandoah 3.

24 In that instance, you'll agree with me
25 that ConocoPhillips didn't need additional appraisal 14:56:11

1 wells to understand the Shenandoah resource
2 potential?

3 MR. GRUENSTEIN: Objection.

4 THE WITNESS: I would not necessarily
5 agree. 14:56:24

6 BY MS. JENSEN:

7 Q. You -- you don't have enough information
8 to agree or disagree, do you?

9 A. That's correct.

10 Q. Okay. You opined that after the results 14:56:32
11 of Shen 3 were released, investors understood
12 Anadarko was unlikely to invest in Shenandoah at
13 then-prevailing oil prices; right?

14 A. I would not say just at then-prevailing
15 prices. With what was known at that time, yes, 14:56:57
16 that's correct. It's not merely a pricing issue.

17 Q. Okay. So do you want to amend your
18 opinions that refer to "then-prevailing oil prices,"
19 then?

20 A. No. Then-prevailing oil prices were a 14:57:32
21 driver, but the decision to proceed is a function of
22 oil prices, plus reserve potential, plus development
23 and costs. There are three main inputs into that
24 decision.

25 Q. Okay. But you do refer in your opinions 14:57:59

1 to then-prevailing oil prices; correct?

2 A. Yes. Yes. That was a -- that's certainly
3 a negative, yes.

4 Q. What is your opinion -- what is the basis
5 for saying that all investors understood this 14:58:12
6 information the same way as you interpreted it?

7 A. Again, I am not saying all investors. I'm
8 saying the market interpreted this, that in a
9 declining price environment, the volume of reserves
10 necessary and/or the cost to install a platform 14:58:28
11 would need to change to justify investments, all
12 things being equal.

13 Q. And if the company had told the market
14 that it didn't believe its -- its exploration was
15 being hurt by oil -- lower oil prices, would you 14:58:56
16 change your opinion?

17 MR. GRUENSTEIN: Objection.

18 THE WITNESS: I would say everyone in the
19 market knew that exploration was impacted by lower
20 oil prices. This is -- 14:59:08

21 BY MS. JENSEN:

22 Q. And --

23 A. -- again --

24 Q. And so just --

25 A. -- the driver. 14:59:12

1 Q. So if -- and -- but if the company told
2 the market that lower oil prices would not hurt its
3 exploration, would you change your opinion?

4 A. If the company said lower -- lower oil --
5 and I -- I -- I'd -- I'd -- I can't quite understand 14:59:33
6 that scenario. A commodity-focused entity saying
7 oil prices didn't have any impact, that -- that
8 simply doesn't make sense to me.

9 Q. So are you disputing that the company told
10 the market it didn't believe that its exploration 14:59:56
11 was hurt by lower oil prices?

12 A. Well, no, I'm not disputing that because
13 obviously at this point, this is a field that wasn't
14 going to come on production for several years. So
15 it isn't current oil prices. It's the projection of 15:00:11
16 oil prices at the time production commences. Those
17 are two very different time frames.

18 Q. Right.

19 Because the then-prevailing oil prices
20 were not what was projected into the future; 15:00:23
21 correct?

22 A. That is correct.

23 Q. And, in fact, Anadarko didn't use spot
24 pricing, did it?

25 A. Few people use spot pricing. You use a 15:00:36

1 strip or a consensus on forward prices, that's
2 correct.

3 Q. Which looks at future prices?

4 A. That's the strip, and that's what forwards
5 are, yeah. 15:00:48

6 Q. And at the time the under- -- using strip
7 prices, the prices of oil were expected to go up;
8 correct?

9 A. They were.

10 Q. So, for example, Bank of America had the 15:01:21
11 Brent price of oil at \$80 a barrel in 2019; correct?

12 A. I believe that's correct, yes. I don't
13 have that number in front of me, but that sounds
14 reasonable.

15 Q. And -- and the market didn't expect for 15:01:37
16 Shenandoah to come online before then, did it?

17 A. The market did not expect that, no.

18 Q. Okay. In your report you also opine that
19 investors understood the Shen 4 encountered salt;
20 correct? 15:02:13

21 A. That is correct, yes.

22 Q. And what's the basis for opining that all
23 investors understood that the same way you did?

24 A. Again, not all investors, but the market,
25 this was disclosed. 15:02:23

1 Q. And where was it disclosed?

2 A. In -- in public announcements after Shen 4
3 was drilled. So this would have been -- let's see,
4 it -- the Shen 4, my recollection, was finalized at
5 the end of 2015, so results were known beginning 15:02:38
6 2016-ish. I -- I do know -- I -- I recall that in
7 an earnings call after Shen 4, the company said Shen
8 5 would be necessary.

9 Q. Okay. But that's a different question
10 than what I asked. 15:02:58

11 Can you point me to one statement by the
12 company that used the word "salt"?

13 A. I -- I can't right now, no. No.

14 Q. And, in fact, the company never said the
15 word "salt" -- 15:03:11

16 A. Okay. Fine. We knew we were drilling
17 subsalt. So that's fine, yeah.

18 Q. Any analyst report talk about Shenandoah 4
19 hitting salt?

20 A. Not that I recall, no. 15:03:24

21 Q. An- -- any investor?

22 A. Not that I recall, no.

23 Q. And the company also didn't disclose that
24 Shen 4 hitting salt reduced the resource size by a
25 third; correct? 15:03:40

1 A. They -- they did not disclose that, no.
2 They did not make that statement.

3 Q. Okay. And no statement that Shenandoah
4 reduced the areal extent of the reservoir by more
5 than 900 acres?

15:03:49

6 MR. GRUENSTEIN: Objection.

7 THE WITNESS: Not a specific -- not that I
8 recall, no.

9 BY MS. JENSEN:

10 Q. And, in fact, some investors understood -- 15:04:07
11 or misunderstood that Shenandoah 4 actually
12 increased the resource size; correct?

13 A. So- -- I can't speak to what some
14 investors -- what an investor could have said. I do
15 know the Shen 4 was drilled on the western side of 15:04:26
16 the reservoir and was certainly not as -- as
17 encouraging as Shen 5 proved to be.

18 Q. You cite RBC in your report?

19	A. I do.
----	----------

20 | 0. And that's a credible source? 15:04:38

21	A. They are, yes.
----	-------------------

22 Q. A sophisticated investor?

23 A. It's a -- a major bank, an investment
24 bank, yes.

25 Q. Okay. You should be able to see what has 15:05:12

1 been marked as Exhibit 510.

2 (Keller Deposition Exhibit 510 was marked
3 electronically.)

4 THE WITNESS: I'm going to. It's not up
5 yet. Give me a second. I'm on 509. There's 510 15:05:25
6 just came up.

7 Okay. I got it now.

8 BY MS. JENSEN:

9 Q. Okay. So for the record, this is a
10 document that bears the Bates stamp RBCCM00000150. 15:05:47

11 Have you seen this document before?

12 A. I believe I have, yes.

13 Q. Is this a document that's cited in your
14 report?

15 A. I believe it is. 15:06:06

16 Q. And you didn't cite it for this
17 proposition, did you?

18 A. I don't recall. I reviewed hundreds of
19 reports, so...

20 Q. Well, if it was relevant to this question, 15:06:16
21 you would have of course cited it in your report;
22 correct?

23 A. I would hope so.

24 Q. So you -- turn down -- so the -- on the
25 first page there is a heading in blue that says "Key 15:06:35

1 points."

2 Do you see that?

3 A. I do see it, yes.

4 Q. And the second-to-the-last paragraph --

5 A. "Continued success" -- 15:06:46

6 THE COURT REPORTER: I'm sorry.

7 BY MS. JENSEN:

8 Q. Yes.

9 THE COURT REPORTER: One at a time,
10 please. 15:06:50

11 BY MS. JENSEN:

12 Q. Okay. Could you read that par- --
13 paragraph, please.

14 A. Yes. "Continued success in development
15 projects" -- "projects in the Gulf of Mexico. The 15:06:57
16 fourth Shenandoah appraisal well successfully
17 encountered more than 620 net feet of oil pay,
18 extending the lowest known oil column downdip. This
19 could portend increasing the resource potential in
20 the basin. Additionally, first oil at the 15:07:14
21 Heidelberg pro-" -- "project is expected in 2016."
22 [As read]

23 Q. So this report doesn't mention anything
24 about salt; correct?

25 A. My recollection is that the initial well 15:07:26

1 encountered salt and that the net pay was
2 encountered in the sidetrack, two different
3 wellbores.

4 Q. Okay. This one doesn't mention anything
5 about salt; correct? 15:07:41

6 A. It does not. But the -- the wellbore it's
7 mentioning was 620 feet of net pay. I don't believe
8 encountered any salt. That was a -- a sidetrack.

9 Q. Okay. But it doesn't mention anything
10 about the initial results of the well being salt; 15:07:56
11 correct?

12 A. I -- not that I read, no, it does not.

13 Q. Yeah.

14 It also doesn't say that it reduced the
15 resource size? 15:08:05

16 A. It does not say that, no.

17 Q. Okay. And, in fact, it says that it
18 portended the increase of the resource potential?

19 MR. GRUENSTEIN: Objection.

20 THE WITNESS: It portended. 15:08:18

21 BY MS. JENSEN:

22 Q. Right. That's what I said; right?

23 A. I -- no, no. I'm -- I'm agreeing. It
24 says --

25 Q. Oh. 15:08:26

1 A. -- portended.

2 Q. Okay.

3 A. Which does not mean it confirmed. It
4 portended. It was a data point.

5 Q. Well, portend means to be a sign; correct? 15:08:33

6 A. Well -- well, it -- it -- again, it's
7 potential. Portend, an increasing resource
8 potential, again, potential. And at the same time
9 Anadarko said it needed to drill 5 after drilling 4.

10 Q. And so it's a sign of something likely to 15:08:52
11 happen; correct? Do I need to get a dictionary out?

12 A. No, you don't need to get --

13 MR. GRUENSTEIN: Objection.

14 THE WITNESS: -- dictionary out.

15 BY MS. JENSEN: 15:09:06

16 Q. You'll agree with me; right?

17 THE WITNESS: It portends. I'll agree it
18 says --

19 THE COURT REPORTER: I'm sorry.

20 THE WITNESS: -- portend -- 15:09:08

21 THE COURT REPORTER: One person -- wait --

22 THE WITNESS: -- potential.

23 THE COURT REPORTER: Hold on. Can we slow
24 down?

25 MS. JENSEN: Okay.

1 THE COURT REPORTER: There's multiple
2 people --

3 THE WITNESS: Yes.

4 THE COURT REPORTER: -- speaking.

5 THE WITNESS: It portends potential, I 15:09:09
6 would agree that that's what it says, yes.

7 BY MS. JENSEN:

8 Q. Okay. Thank you.

9 Okay. You also opine in your report that
10 investors did not view defendant statements about 15:09:20
11 Shen 4 results as confirming any particular resource
12 range.

13 What's the basis for saying all investors
14 understood this information the same way as you did?

15 A. Once again, I'm not saying all investors. 15:09:33
16 I'm saying the market understood this because
17 Anadarko definitively stated it needed to drill 5.
18 It did not yet have enough information to sanction
19 this project.

20 Q. Did you talk to any investors about what 15:09:47
21 they understood this to mean?

22 A. I did not.

23 Q. You don't say in this the market, you say
24 investors; correct?

25 A. Okay. I'm using the two interchangeably. 15:09:57

1 You're saying all investors. I'm differentiating to
2 your all investors and my investors.

3 Q. Okay. So did you speak to any investors
4 to confirm that that's the way they understood this
5 information?

15:10:14

6 A. I did not.

7 Q. And in this portion of your report, you do
8 not cite any investors, do you?

9 A. No. I said -- I'm speaking of the market.
10 I'm using the market and investors interchangeably.

15:10:22

11 Q. But you don't cite any investors in
12 your --

13 A. That's correct.

14 Q. -- report.

15 A. I do not.

16 THE COURT REPORTER: Sorry. Wait.

17 THE WITNESS: That's corr- --

18 THE COURT REPORTER: If we can wait --

19 BY MS. JENSEN:

20 Q. You also don't cite any analysts in this
21 section of your report, do you?

15:10:31

22 A. Not that I recall.

23 Q. So you don't have any support for this
24 opinion other than your own interpretation; correct?

25 MR. GRUENSTEIN: Objection.

15:10:44

1 THE WITNESS: And Anadarko's statement
2 that it needed additional information before moving
3 forward.

4 BY MS. JENSEN:

5 Q. Which you credit as true; correct? 15:10:51

6 A. I do.

7 Q. And the market understood that Anadarko
8 was drilling Shen 5 just to confirm its ultimate
9 size; correct?

10 A. To get additional information to confirm 15:11:36
11 the size of the reservoir, that's correct.

12 Q. But it was just confirming its ultimate
13 size; correct?

14 A. I'm not sure the -- the point you're
15 making. 15:11:49

16 Q. Do you know Imperial Capital?

17 A. I know the name.

18 Q. And you cite it in your report; correct?

19 A. Yes, I do.

20 Q. So it's a credible source? 15:11:59

21 A. I believe them to be credible.

22 Q. Okay. A sophisticated investor?

23 A. I would agree.

24 Q. Okay. You should be able to see what has
25 been marked as Exhibit 511. 15:12:52

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1 (Keller Deposition Exhibit 511 was marked
2 electronically.)

3 THE WITNESS: Okay. Hold on. Coming up.
4 I've got it.

5 BY MS. JENSEN: 15:13:10

6 Q. And did you review this report in forming
7 your opinions?

8 A. I believe that I reviewed it.

9 Q. And, in fact, you cite this in your
10 report? 15:13:23

11 A. Yes, I believe that's correct.

12 Q. And so you've reviewed what Imperial
13 Capital said about Shenandoah at this time?

14 A. I would have to refresh my memory.

15 Q. So if you look at page 7. 15:13:35

16 A. Okay. I'm scrolling.

17 Q. And for the record, this document --

18 A. I'm at page 7, yes.

19 Q. Okay. Good.

20 Now, for the record, this document bears 15:14:01
21 the Bates stamp IC-000001.

22 Okay. So you're on page 7 now?

23 A. I am on page 7, yes.

24 Q. Okay. And it refers to, if you look down
25 the page, to APC's mega-projects. 15:14:16

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1 A. Yes.

2 (Simultaneous speaking.)

3 (Interruption in audio/video.)

4 THE COURT REPORTER: I'm sorry, mega what?

5 MS. JENSEN: Projects. 15:14:26

6 BY MS. JENSEN:

7 Q. And you see that according to Imperial
8 Capital, those mega-projects "include the potential
9 +1.0 billion barrel Shenandoah discovery in the U.S.
10 Gulf of Mexico perhaps one of the largest oil fields 15:14:45
11 found in the last -- past five years in the U.S.
12 deepwater"?

13 A. Yes.

14 Q. And so it's parroting the terminology that
15 the company used with one of the largest oil fields? 15:15:02

16 A. Potentially.

17 (Simultaneous speaking.)

18 (Interruption in audio/video.)

19 THE COURT REPORTER: Was there an
20 objection? 15:15:11

21 MR. GRUENSTEIN: Yes.

22 BY MS. JENSEN:

23 Q. Okay. If you turn back now to page 3.

24 A. Okay. Going there.

25 Okay. 15:15:25

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1 Q. Okay. So the page has at the top the
2 heading "Rationale"?

3 A. Yes, I'm at page 3.

4 Q. Okay. And you see if you scroll down the
5 page, APC also has some next generation mega-pro- -- 15:15:37

6 A. Yes.

7 Q. -- -jects?
8 "Advancing quickly."

9 And that refers the same projects as we
10 just saw on the page prior -- 15:15:44

11 A. Yes.

12 Q. -- to that?

13 A. Yes.

14 Q. Okay. And it says here, "They just need
15 an appraisal well or two"? 15:15:52

16 A. Yes, I read that.

17 Q. Okay. And it says, also, "The giant
18 Shenandoah oil field in the deep-water Gulf of
19 Mexico will go forward, in our opinion, as APC is
20 just confirming its ultimate size with the next 15:16:06
21 (4th) well to design facilities." [As read]

22 A. I read that, yes.

23 Q. And so are they talking about the 4th or
24 the 5th?

25 A. They are talking -- this says here the 15:16:18

1 4th.

2 Q. And so is that Shen 4, or is that Shen 5?

3 A. I believe this is Shen 4.

4 Q. Okay. So the market understood that with
5 Shen 4, Anadarko was just confor- -- confirming its 15:16:30
6 ultimate size; correct?

7 A. I don't agree with that characterization.

8 Q. Well --

9 A. This is Imperial saying in our opinion,
10 APC is just confirming. Anadarko, on contrast, had 15:16:42
11 said it needed to drill 5 and 6. So this is
12 Imperial's opinion. This is not the market's
13 opinion.

14 Q. Okay. How do you differentiate between
15 the two? 15:16:53

16 A. Imperial is one bank out of a larger
17 universe. So Imperial thinks this to be true. I
18 would assume that they have reasonable basis to
19 believe it's true. But Anadarko, the operator in
20 possession of more information than Imperial, said 15:17:09
21 it still did not have enough information to sanction
22 and needed to drill 5, and then needed to drill 6.

23 Q. So are --

24 A. This is a process.

25 Q. Okay. So even though this is a source 15:17:19

1 that you cite as credible and you've agreed it's a
2 sophisticated investor, this is -- you don't credit
3 this opinion?

4 MR. GRUENSTEIN: Objection. Compound.

5 THE WITNESS: I'm saying it's an opinion. 15:17:35

6 BY MS. JENSEN:

7 Q. And did this --

8 A. Sub --

9 Q. Did you factor --

10 A. Sub -- 15:17:41

11 Q. -- this opinion into --

12 (Simultaneous speaking.)

13 (Interruption in audio/video.)

14 THE COURT REPORTER: I'm sorry, did you
15 have -- I didn't -- could you start over, please. 15:17:46

16 BY MS. JENSEN:

17 Q. Did you consider this report when you were
18 forming your opinion?

19 A. I read this report and took it as one --
20 one entity's opinion. But I certainly gave more 15:17:56
21 weight to the fact that the operator said it needed
22 additional information before it could move forward.

23 Q. So this is referring to Shen 4, and at
24 least one sophisticated investor believes Anadarko
25 is simply confirming its ultimate size; correct? 15:18:22

1 A. Anadarko never said that. This --
2 Imperial Capital says this, correct.

3 Q. Right. And that's what I'm referring to.

4 A. Yeah, yeah.

5 Q. Okay. And so on a conference call after 15:18:31
6 Shen 4, defendant Daniel said we're in the same
7 range; correct?

8 A. I believe that's correct.

9 Q. And that was important to the market
10 because that was what sophisticated investors wanted 15:18:46
11 to know from Shen 4?

12 MR. GRUENSTEIN: Objection.

13 THE WITNESS: Again, I'd only caveat that
14 by saying range of reserves does not necessar- --
15 large reserves are not necessarily producible. 15:19:05
16 There are lots of big reserves that are never
17 produced because the costs are too high relative to
18 the potential value. So reserves -- the existence
19 of reserves does not necessarily mean they will be
20 developed. 15:19:19

21 BY MS. JENSEN:

22 Q. But with that caveat, otherwise you agree;
23 correct?

24 MR. GRUENSTEIN: Objection.

25 THE WITNESS: I agree with -- I -- repeat 15:19:25

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1 your statement, please, before I can agree or
2 disagree.

3 BY MS. JENSEN:

4 Q. But that's what the market was looking for
5 with Shen 4 to confirm the size of Shenandoah? 15:19:33

6 A. No --

7 MR. GRUENSTEIN: Object --

8 THE WITNESS: -- I didn't -- I don't agree
9 with that. That's what -- that's what one analyst,
10 one bank was saying, whereas others were saying 15:19:42
11 they -- it was still too early.

12 BY MS. JENSEN:

13 Q. Okay. But you'll agree with me that at
14 least one sophisticated investor --

15 A. I would agree that Imperial said this, 15:19:51
16 yes.

17 Q. Okay.

18 MR. GRUENSTEIN: Peter, just let -- let
19 Rachel finish her question.

20 THE WITNESS: I'm sorry. Yeah. 15:19:59

21 MS. JENSEN: So eager to answer my
22 questions. Okay.

23 BY MS. JENSEN:

24 Q. Okay. In your report you also opine that
25 investors understood after Shen 4 that any FID would 15:20:38

1 depend on the information gathered from Shen 5 and
2 Shen 6 as Anadarko --

3 A. Correct.

4 Q. -- could better understand the size and
5 quality on the east side of the prospect; co- -- 15:20:50
6 correct?

7 A. Correct. Yes.

8 Q. And what's the basis for your opinion that
9 investors understood this information exactly as you
10 did? 15:21:04

11 A. Repeated statements by the company that
12 they needed to drill 5 and 6 before they could
13 commit capital to develop the field.

14 Q. You don't -- you -- you didn't survey --
15 survey any investors -- 15:21:18

16 A. I did not.

17 Q. -- for this opinion?

18 (Simultaneous speaking.)

19 (Interruption in audio/video.)

20 THE COURT REPORTER: I'm sorry, I did -- 15:21:24
21 for this what?

22 BY MS. JENSEN:

23 Q. Opinion.

24 A. I did not.

25 Q. And, in fact, you don't cite any investors 15:21:32

1 for this opinion, do you?

2 A. I cite public statements by the company
3 about what was necessary to advance the project.

4 Q. But that's not answering my question. You
5 don't cite any investors, do you? 15:21:44

6 A. You've asked me repeatedly; and, no, I
7 have not cited any individual investor. I'm citing
8 what the market was aware of.

9 Q. So you don't have any reason to believe
10 that investors understood this information exactly 15:22:04
11 as you did; correct?

12 A. My opinion is the market understood this,
13 and could you find an investor that had a different
14 opinion, I'm certain that you could. But the market
15 understood what was necessary to advance this 15:22:20
16 project.

17 Q. Okay. And, in fact, in this section you
18 don't cite any source other than the company;
19 correct?

20 A. That is correct. 15:22:30

21 Q. And you're assuming with this opinion that
22 Anadarko, its internal decision-making was what it
23 said to the market; correct?

24 MR. GRUENSTEIN: Objection.

25 THE WITNESS: I would say correct because 15:22:56

1 Anadarko controls the capital investment. And
2 without capital investment in a platform, there will
3 be no development; there will be no reserves, that's
4 correct.

5 BY MS. JENSEN: 15:23:11

6 Q. And you're assuming that Anadarko's
7 decision depended on the results of both Shen 5 and
8 Shen 6?

9 A. That was their statement, and I believe it
10 to be true, yes. 15:23:24

11 Q. And if it is incorrect, then your opinion
12 would be ba- -- would be based on a faulty
13 assumption; correct?

14 A. It's a statement of intention. I don't
15 know how you would prove that to be false. They 15:23:37
16 said it was dependent on 5, and they drilled 5 and
17 spent significant money. Then they drilled 6 and
18 spent significant money. So it wasn't just a
19 statement. It was a statement followed by
20 dedication of significant capital. 15:23:49

21 Q. And you didn't review any internal
22 documents to determine when Anadarko made its
23 decision to write off Shenandoah, did you?

24 A. I -- I did not, no.

25 Q. So you have no idea whether Anadarko based 15:24:01

1 its decision on results of Shenandoah 5 or 6;

2 correct?

3 A. I have an opinion.

4 Q. Do you have any information for that

5 opinion, or you're just going to go ahead and make 15:24:16

6 that opinion?

7 A. I have --

8 MR. GRUENSTEIN: Objection.

9 THE WITNESS: -- an opinion based on the

10 fact that Anadarko comitted a significant part of 15:24:22

11 its capital budget to the drilling of two additional

12 wells.

13 BY MS. JENSEN:

14 Q. But you haven't looked at any internal

15 documents? 15:24:30

16 A. That's correct.

17 Q. So you don't know what the decision turned

18 on; correct?

19 A. I am taking their statements as true.

20 MS. JENSEN: Okay. Let's go off the 15:24:48

21 record.

22 THE VIDEOGRAPHER: We're off the record?

23 Okay.

24 Off the record. It's 3:24 p.m.

25 (Short recess taken.) 15:25:24

1 THE VIDEOGRAPHER: We're back on the
2 record. It's 3:49 p.m.

3 BY MS. JENSEN:

4 Q. Okay. Welcome back, Mr. Keller. Now,
5 your report at paragraph 90 talks about how, 15:49:13
6 "Investors understood that investments in Shenandoah
7 would be impacted by develop- -- developments in the
8 rest of the Gulf of Mexico, as Anadarko [sic] would
9 be able to leverage existing infrastructure and take
10 advantage of tiebacks"; correct? 15:49:31

11 A. That's correct.

12 Q. Is -- another way of saying that is
13 brownfield; correct?

14 A. Not brownfield. I'm talking about subsea
15 tieback, so you can spread capital cost over 15:49:47
16 multiple fields.

17 Q. Well, taking advantage of existing
18 infrastructure; right?

19 A. Yeah, yeah.

20 Q. And so taking advantage of existing 15:49:57
21 infrastructure is one form of brownfield; correct?

22 A. I guess you can say that. Brownfield's a
23 little incongruence when you're talking about
24 deepwater. But I -- I get your drift, yeah.

25 Q. Right. In other words, it's being able to 15:50:14

1 use existing infrastructure and not creating
2 everything from scratch?

3 A. Correct.

4 Q. Okay. And you're aware that the company
5 said in September of 2016 that Anadarko didn't need 15:50:31
6 material commodity price improvements to make money
7 in the Gulf of Mexico; correct?

8 A. I am aware of that, yes.

9 Q. That's an instance at which the company
10 referred to strip pricing which refers to future 15:50:56
11 pricing of oil, not --

12 A. Correct.

13 Q. -- the then-prevailing pricing of oil;
14 correct?

15 A. Correct. 15:51:04

16 Q. Okay.

17 A. Not spot price, yeah.

18 Q. Okay. You also opine that by no later
19 than May 2016, investors understood there was
20 faulting in the Shenandoah basin, including between 15:51:17
21 Shen 2 and Shen 3 and between Shen 2 and Shen 4;
22 correct?

23 A. Can repeat the date, please.

24 Q. May 2016.

25 A. By May -- May of 2016, yeah, okay. 15:51:31

1 She- -- Shen 4 was completed, that's correct. Shen
2 4 was done, yeah.

3 Q. Okay. And so you'll -- you'll concede
4 there was no statement before May 2016; correct?

5 A. That there was no statement on faulting? 15:51:47

6 Q. Yes.

7 A. I -- I don't recall.

8 Q. If there was, you would have included it
9 in your report; correct?

10 A. I would expect myself to have done that, 15:52:03
11 yes.

12 But I -- I don't recall that there was a
13 statement. That's all I'm saying.

14 Q. You don't recall there was a statement
15 before May of 2016; correct? 15:52:13

16 A. Correct.

17 Q. Okay. And you understand that a
18 whistleblower complaint had been launched with the
19 company by this date; correct?

20 A. I was. 15:52:23

21 Q. You weren't aware at the time, were you?

22 A. At -- at what time?

23 Q. In May of 2016.

24 A. No. No, certainly not.

25 Q. You only became aware of that as part of 15:52:32

1 this ligation?

2 A. That is correct, yes.

3 Q. And by this time frame of May 2016,

4 Anadarko was aware of small-scale faulting at the

5 scale of 300 to 400 feet; correct?

15:52:48

6 A. By May of 2016, yes, they had drilled 3

7 and 4, so they had some information about faulting.

8 Q. That's not -- that's not my question.

9 My question is that they were re aware of

10 small-scale faulting at the scale of 300 to

15:53:02

11 400 feet?

12 A. I don't recall the exact scale. They were

13 aware of faulting, so I don't recall exact -- exact

14 scale.

15 Q. Okay. And so are you aware that at the

15:53:13

16 time Anadarko was aware of small-scale faulting?

17 A. I don't -- I don't recall.

18 Q. Okay. And are you aware that by this

19 time, the company had concerns that Shenandoah may

20 be a busted-up reservoir?

15:53:29

21 A. Generally, yes.

22 Q. And the -- that piece, the busted-up

23 reservoir, that was not disclosed to the market;

24 correct?

25 MR. GRUENSTEIN: Objection.

15:53:40

1 THE WITNESS: I don't believe it was in
2 its one factor.

3 BY MS. JENSEN:

4 Q. Now, the statement from the company in May
5 of 2013 blamed poor seismic imaging; correct? 15:53:52

6 MR. GRUENSTEIN: Objection.

7 THE WITNESS: Seismic is generally
8 degraded subsalt, that's correct.

9 BY MS. JENSEN:

10 Q. Right. And -- and they blamed -- they 15:54:08
11 blamed it on poor seismic imaging; correct?

12 MR. GRUENSTEIN: Objection.

13 THE WITNESS: That's my recollection, yes.

14 BY MS. JENSEN:

15 Q. But faults were known internally at the 15:54:20
16 company long before then; correct?

17 MR. GRUENSTEIN: Objection.

18 THE WITNESS: It's a re- -- it's a region
19 characterized by faulting. Exact location generally
20 is not known with certainty until there are 15:54:32
21 penetration [verbatim].

22 BY MS. JENSEN:

23 Q. And the company specifically held out
24 Shenandoah as above average for the region; correct?

25 MR. GRUENSTEIN: Objection. 15:54:46

1 THE WITNESS: I believe that's --

2 statements were made to that effect, yes.

3 BY MS. JENSEN:

4 Q. And nowhere in the statement in May of

5 2016 did the company disclose that it had known 15:55:01

6 years before that about faulting in -- in

7 Shenandoah; correct?

8 MR. GRUENSTEIN: Objection.

9 THE WITNESS: That region of the gulf was

10 generally acknowledged to be subject to faulting. 15:55:17

11 BY MS. JENSEN:

12 Q. But, yeah. I -- so, Mr. Keller, I don't

13 want to go round and round on this because we could

14 just go --

15 A. Yeah, understand. 15:55:27

16 Q. Okay. So if you could answer my question,

17 because you've already answered that question, we've

18 gone around on that one.

19 A. Okay.

20 Q. So -- so my -- my question to you was to 15:55:36

21 nowhere in that statement did the company disclose

22 to them nine years before that about faulting in

23 Shenandoah; correct?

24 MR. GRUENSTEIN: Objection.

25 THE WITNESS: I believe that's correct. 15:55:51

1 BY MS. JENSEN:

2 Q. And in that statement the company also
3 said that it was -- it needed to include the
4 faulting in its development plan?

5 A. Different geologists and geophysicists had 15:56:04
6 different interpretations of the data.

7 MS. JENSEN: I'm going to strike that as
8 nonresponsive. That has nothing to do with the
9 question I asked.

10 BY MS. JENSEN: 15:56:23

11 Q. Did -- the -- the company also said it
12 needed to include that in its development plan;
13 correct?

14 MR. GRUENSTEIN: Objection.

15 THE WITNESS: That would be a factor 15:56:30
16 included, yeah.

17 BY MS. JENSEN:

18 Q. Right. In other words, it inferred that
19 Shenandoah's still on track for development; right?

20 MR. GRUENSTEIN: Objection. 15:56:36

21 THE WITNESS: It was still on track until
22 Shenandoah 6.

23 BY MS. JENSEN:

24 Q. And that's what your opinion's based on;
25 right? 15:56:49

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1 A. Yes, ma'am. Yes, it is.

2 Q. Okay. And nowhere in that statement did
3 it -- did the company say that faulting had rendered
4 Shenandoah uncommercial; correct?

5 A. Faulting per se does not do that. 15:57:02

6 Q. And so they didn't say that; right?

7 A. That's correct.

8 Q. Okay. It also didn't say that senior
9 management had already decided against developing
10 Shenandoah as the operator; right? 15:57:16

11 A. Correct.

12 Q. All right.

13 Bear with me here for a second -- a
14 moment.

15 Okay. So paragraph 266 you talk about 15:57:54
16 what Cobalt said around this time?

17 A. I'm going to the citation. 266?

18 Q. Yes. And just to orient you, that is on
19 page 126.

20 A. Okay. I'm there now. 15:58:28

21 Q. Okay. So nothing in that paragraph
22 mentions faulting; correct?

23 A. I'm reading the paragraph now.

24 I do not see any mention of faulting, no.

25 Q. Okay. And you don't cite any other 15:58:47

1 company statement that uses the word "faulting";
2 correct?

3 A. I don't believe I do.

4 Q. In your paragraph 268, you say that
5 "Plaintiffs' investment managers were clearly aware 15:59:11
6 of Shenandoah's complex structural properties and
7 appraisal uncertainties." What's the basis for this
8 statement?

9 A. You have corrected me today. My -- the
10 basis of the statements by Fidelity, Janus and 15:59:24
11 Wellington, who you -- I did not realize until today
12 when you told me that they were not in fact IMS to
13 the plaintiffs.

14 Q. For the class reps, that's right.

15 A. Yeah, excuse me, the class reps. Excuse 15:59:36
16 me, yes. Yes.

17 Q. Except for -- and I just want to make sure
18 we're clear, except for Janus?

19 A. Yeah, okay. Excuse me, yes. Yeah.

20 Q. Yeah. And so, then the only basis for 15:59:48
21 your statement here is the paragraph -- let's see,
22 268 b?

23 A. 268 b, as in "boy"?

24 Q. Yeah.

25 A. Okay. I read it. 16:00:12

1 Q. Okay. So that's what I'm saying. So --
2 so taking out the other entities, that is the basis
3 for this paragraph; correct?

4 A. I would say yes.

5 Q. And 268 b does not have the word "fault" 16:00:38
6 in it, does it?

7 A. No.

8 Q. And it also says that it doesn't
9 necessarily mean the reservoir is bad; correct?

10 A. That is correct. 16:00:55

11 Complexity is often a function of
12 faulting, though. A complex reservoir is one that's
13 not continuous or not interconnected with good
14 communication.

15 Q. It's not synonymous, but it can be used 16:01:14
16 for?

17 A. That is correct.

18 Q. But again, just to reiterate, the --
19 that -- that quote does not mention --

20 A. I don't see faulting in that quote; that's 16:01:23
21 correct.

22 Q. Okay. And so, just to reiterate, there's
23 no other company statement that said there was
24 faulting; correct?

25 A. I'd have to refresh myself. I think 16:01:40

1 Anadarko had discussed faulting it had encountered
2 when it was drilling.

3 Q. The May 26 statement; right?

4 A. I believe even earlier. I believe on

5 May 3rd, Anadarko talked about faulting. 16:02:05

6 Q. Well, that's the one we talked about
7 before.

8 A. Okay, yeah. Yeah, I'm sorry, you said

9 May 26th. I thought you were talking about

10 something else. Yeah, okay, fine. 16:02:16

11 Q. Okay. So -- but that was the only time
12 that the company mentioned faulting; correct?

13 A. Well, May 20 -- the -- the UBS conference
14 sales had mentioned faulting.

15 Q. Well, they didn't say it anywhere during 16:02:26
16 the conference, did they?

17 A. I would have to refresh myself. My
18 recollection was that they did talk about faulting.

19 Q. But if they didn't, then would you change
20 your opinions? 16:02:40

21 A. I don't know --

22 MR. GRUENSTEIN: Objection.

23 (Simultaneous speaking.)

24 (Interruption in audio/video.)

25 THE COURT REPORTER: I'm sorry, could you 16:02:46

1 start -- could you repeat.

2 BY MS. JENSEN:

3 Q. So that was not part of the --

4 MR. GRUENSTEIN: Let him answer the

5 question. 16:02:51

6 BY MS. JENSEN:

7 Q. So you didn't rely on --

8 MR. GRUENSTEIN: No. No. There was a

9 question that was pending. I objected, and he can

10 answer. 16:02:57

11 Do you have the question, Peter?

12 THE WITNESS: No. Can you repeat the

13 question, please.

14 BY MS. JENSEN:

15 Q. If they didn't, would that change your 16:03:08

16 opinion?

17 A. Again, can you -- if they didn't what?

18 Q. If they didn't mention the word "faulting"

19 at the UBS conference, would that change your

20 opinion? 16:03:20

21 A. Again, faulting is -- is just one

22 component.

23 Q. Okay. But you're not contending that they

24 said the word "fault" at that conference; correct?

25 A. As I said, I'd -- I'd have to refresh my 16:03:29

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1 recollection. I -- I don't recall if they
2 specifically used the word "faulting."

3 Q. In fact, they did not use the
4 word "faulting."

5 MR. GRUENSTEIN: Objection. 16:03:43

6 BY MS. JENSEN:

7 Q. Right. Sitting here today, you don't know
8 that they used that word?

9 A. My recollection the graphic from that UBS
10 conference included a line that would indicate a 16:03:54
11 fault.

12 Q. But they didn't say the word "fault";
13 correct?

14 A. I'd -- I'd have to read the transcript
15 again. Looking at the graphic, I would say I see 16:04:06
16 fault.

17 Q. Well, but it doesn't say the word "fault";
18 does it?

19 A. Okay, okay, fine.

20 Q. And there's not a key that says fault; 16:04:17
21 correct?

22 A. There's not a key that says fault; that's
23 correct.

24 Q. In fact, after the write-off, analysts
25 said that it appeared to be much more 16:04:32

1 compartmentalized than they had thought; correct?

2 A. Compartmentalization is a result of
3 faulting. But you can have compartmentalization
4 with a thick pay zone and/or high permeability and
5 prosody and still high commerciality. So, again, 16:04:54
6 faulting and compartmentalization is one function,
7 as is permeability, porosity, reservoir drive, and
8 depth of the productive horizon.

9 Q. Okay. So Mr. Keller, if you could just
10 focus on my question. 16:05:13

11 A. Yep, I'm trying to.

12 Q. I know. We'll get through this, I
13 promise, if you can just focus on my question. So
14 your answer had nothing to do with my question.

15 My question was: After the write-off, did 16:05:23
16 analysts say that Shenandoah appeared to be much
17 more compartmentalized than they had thought during
18 the class period?

19 A. I think there were analysts at multiple
20 times that said this was a complex -- a rise in 16:05:37
21 complex reservoir, not just after the -- not just
22 after the write-off, but during the development and
23 during the drilling appraisal.

24 Q. So are you denying that analysts said that
25 after the write-off it appeared -- 16:05:51

1 A. No, I'm not deny- -- I'm not denying it.

2 Q. Okay.

3 MR. GRUENSTEIN: Peter, just wait for the
4 question --

5 THE WITNESS: Sorry. 16:05:58

6 MR. GRUENSTEIN: -- to --

7 THE WITNESS: Yeah.

8 BY MS. JENSEN:

9 Q. So Société Générale is one of the analysts
10 that you cite in your report; correct? 16:06:24

11 A. SocGen, yes. Yep.

12 Q. Did you review the reports that were
13 produced by Société Générale?

14 A. I reviewed the reports that I footnoted.

15 Q. And so, if they pertained to your 16:06:36
16 opinions, you would have cited in your report;
17 correct?

18 A. I would have attempted to. Again, did I
19 see every single report, I'm not sure that I did.

20 Q. Okay. So I have marked what's -- what 16:06:55
21 we're identifying here as Exhibit 512.

22 (Keller Deposition Exhibit 512 was marked
23 electronically.)

24 A. Okay. One moment.

25 Q. And for the record, this is a document 16:07:07

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1 bears the Bates stamp SG_PROD 068976.

2 A. Okay. I'm there.

3 Q. Okay. Have you reviewed this report
4 before?

5 A. I believe I have. 16:07:37

6 Q. Okay. And then you'll recognize when I
7 point you to the direct -- the portion of the
8 report, that refers to compartmentalized structure,
9 that this was one of the analysts that said post
10 write-off that Shenandoah was more compartmentalized 16:07:56
11 than first thought; correct?

12 A. I'm -- I'm reading through it now.

13 Q. If you need me to point you to the --

14 A. Yeah, if you can point me to --

15 Q. Sure. 16:08:18

16 A. That would save us some time.

17 Q. Okay. So page 10.

18 A. Okay. Yes, I read that, yes.

19 Q. So analysts did comment that after the
20 write-off, it appeared Shenandoah was much more 16:08:59
21 compartmentalized than first thought; right?

22 A. Yes, I mean, the drilling of an additional
23 dry hole shows lack of continuity of reservoir, so
24 that's correct, yes.

25 Q. Well, it doesn't refer in that sentence 16:09:13

1 the Shenandoah 6; does it?

2 A. No. But you will recall that after 4,
3 they said they needed 5. After 5, they said they
4 needed 6, and 6 did not confirm what they were
5 looking for. So then the decision was made to -- to 16:09:27
6 stop.

7 Q. Again, you haven't reviewed any internal
8 documents to know --

9 A. That's correct.

10 (Simultaneous speaking.) 16:09:44

11 (Interruption in audio/video.)

12 THE COURT REPORTER: I'm sorry, wait. I
13 didn't hear the full question.

14 THE WITNESS: I have not reviewed internal
15 documents. 16:09:49

16 BY MS. JENSEN:

17 Q. I mean, if you want to just answer
18 "correct" to all my questions going forward, that's
19 fine, Mr. Keller. I'd be alright with that. I'm
20 not sure your -- 16:09:58

21 A. No, I'll wait -- I'll wait for your
22 questions. I'm sorry.

23 MR. GRUENSTEIN: If he doesn't wait for
24 the answer, just saying "correct" won't help you
25 very much either. 16:10:08

1 MS. JENSEN: That's a good point, Touche.

2 BY MS. JENSEN:

3 Q. Okay. Your report talks about Shenandoah
4 5; correct?

5 A. That is correct. 16:10:31

6 Q. And in your report, you acknowledge that
7 the market thought Shenandoah 5 was a promising
8 development; correct?

9 A. That's correct.

10 Q. In fact, Shenandoah 5 had more net pay 16:10:45
11 than Shenandoah 2; right?

12 A. Yes, it did, yes.

13 Q. And so, the market understood, did it not,
14 that Shenandoah 5 resulted in a -- an increase in
15 the resource size? 16:11:06

16 A. I don't think that's necessarily true. It
17 was a positive data point, but that still needed to
18 drill an additional well.

19 Q. So is it your testimony that no investors
20 thought that Shenandoah 5 increased the resource 16:11:25
21 size of Shenandoah?

22 A. Some might have, some might not have. If
23 you recall, Shen 5 was located in between 1 and 2,
24 not in the flanks, so it did not expand the areal
25 extent. 16:11:41

1 Q. So I marked what's been identified as
2 Exhibit 513, which for the record, is APC-01329 --

3 A. Going to it now -- mm-hmm.

4 Q. -- 41 -- I'm sorry, Mr. Keller, just let
5 me finish the Bates number so that the record is 16:12:11
6 clear.

7 So this is a document that bears the Bates
8 stamp APC-01329241.

9 (Keller Deposition Exhibit 513 was marked
10 electronically.) 16:12:23

11 BY MS. JENSEN:

12 Q. Can you see this document?

13 A. I just pulled it up, yes.

14 Q. Okay.

15 A. I've got it. 16:12:39

16 Q. Okay. And are you familiar with Simmons &
17 Company?

18 A. Matt Simmons was a well regarded analyst,
19 yep.

20 Q. And -- and so, you would -- you would 16:12:50
21 regard Simmons as a sophisticated investor?

22 A. As a knowledgeable oil and gas investor,
23 yes, I would.

24 Q. As a sophisticated investor?

25 A. Yes. 16:13:02

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1 Q. Okay. Now, if you turned to page 3.

2 A. Okay. I'm going there now.

3 Yes.

4 Q. Okay. And you'll see there's a discussion

5 of Shenandoah? 16:13:35

6 A. I'm searching for it now on page 3. I'm
7 sorry, here we -- again -- yes, I'm sorry, I've got
8 it now.

9 Q. Okay. It's somewhat small, so you may
10 need to zoom in. 16:14:10

11 A. I got -- that's what I was doing. Yeah.

12 Q. Okay. Okay.

13 So in approximately the -- it's like a
14 little below the middle of the paragraph, do you see
15 the sentence, "While the company" -- referring to 16:14:33
16 Anadarko -- "has not changed its resource estimate,
17 it appears likely that this has upside to its prior
18 500 MMboe EUR estimate."

19 Do you see that?

20 A. Yes. 16:14:52

21 Q. Okay. And the reference to the 500
22 million barrels UR -- I'm sorry, EUR estimate,
23 that's what we were talking about earlier --

24 A. Yes.

25 Q. -- with respect to giant field; correct? 16:15:01

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1 A. Ultimate recoverables; that's correct.

2 Q. Yeah. So that refreshes your recollection
3 that giant field refers to 500 MMboe --

4 A. Yes.

5 Q. -- EUR? 16:15:11

6 A. Yes.

7 Q. Okay. So that -- that's not gross, that's
8 recoverable --

9 A. Estimated --

10 Q. -- right? 16:15:19

11 A. -- ultimate -- yes.

12 Q. Okay. So based on this report, the
13 sophisticated -- at least one sophisticated investor
14 believed that Shenandoah likely increased the
15 resource size above the company's giant field 16:15:32
16 estimate; correct?

17 A. Well, this would have been after 4, but
18 before 5, if I'm looking at the date correctly, this
19 is June of '16. And 5 didn't -- 5 was drilling in
20 June of '16. It hadn't reached total depth yet. 16:15:54

21 Q. Okay. Well, do you see right after that,
22 the -- it says, "At this juncture APC has shared
23 that the pay zone is as large as 1,000"?

24 A. Yes.

25 Q. What well do you think that's referring 16:16:07

1 to?

2 A. Shen 5.

3 Q. Okay. And areal extent of 5 -- of --

4 sorry, strike that.

5 Has an "areal extent of 9 miles (three 16:16:14
6 blocks)." Is that --

7 A. Yes.

8 Q. -- an increase in what the areal extent
9 was up until that point?

10 A. Well, it's hard for me to say definitively 16:16:26
11 because, as I said, Shen 5 was between 1 and 2, it
12 wasn't on the flank. Shen 4 was western flank,
13 Shen 3 was eastern flank. So that would increase
14 the areal extent. Shen 5 is in the middle, almost
15 midpoint between 1 and 2. So it's confirming good 16:16:44
16 pay in the middle, but I -- I don't know that it
17 necessarily increases the areal extent because you
18 already had 1 and 2 down and penetrated.

19 Q. Okay. And it says that it "has Miocene
20 like rock prop" -- "properties" -- 16:17:00

21 A. Yes, yes.

22 Q. And -- and that was intended to say it was
23 a -- above the average for GOM; correct?

24 A. Yes, yes.

25 Q. Okay. And certainly it doesn't appear 16:17:11

1 that Simmons, as a sophisticated investor, thought
2 that Shenandoah 5 resulted in a significant
3 reduction of Shenandoah resource size --

4 A. No, I thought --

5 Q. -- correct? 16:17:26

6 A. -- Shenandoah 5 was a good well.

7 Q. Yeah. And so, it's your opinion that it
8 increased the resource size?

9 A. Potential resource size, but again, until
10 you make an FID, nothing is recoverable, it's 16:17:41
11 estimated ultimate recoverables, but until you make
12 FID, you can't make anything.

13 Q. Well, certainly Anadarko didn't disclose
14 to the market that Shenandoah resulted in a
15 significant reduction of the resource size; correct? 16:17:55

16 MR. GRUENSTEIN: Objection. Shen --

17 THE WITNESS: No --

18 (Simultaneous speaking.)

19 (Interruption in audio/video.)

20 THE COURT REPORTER: I'm sorry, I didn't 16:18:07
21 hear some of that. Can you please repeat the
22 objection.

23 MR. GRUENSTEIN: I said Shen 5.

24 Ms. Jensen said Shenandoah resulted in a significant
25 reduction. 16:18:14

1 MS. JENSEN: Okay. Thank you for
2 clarifying.

3 BY MS. JENSEN:

4 Q. Correct? I'm sorry. You've already --
5 you've already answered the question. 16:18:24

6 A. Fine, fine.

7 Q. Okay. The company didn't disclose that
8 Shen 5 hit tar; correct?

9 A. Not to the best of my knowledge, no.

10 Q. Okay. You also opine that after Shen 5 -- 16:18:37
11 strike that.

12 You also opine that investors understood
13 that after Shen 5, any FID would depend on the
14 results of Shen 6 --

15 A. That's correct. 16:19:07

16 Q. -- the ability to reduce --

17 (Simultaneous speaking.)

18 (Interruption in audio/video.)

19 THE COURT REPORTER: I'm sorry?

20 BY MS. JENSEN: 16:19:12

21 Q. The ability to reduce development costs
22 and commodity prices; correct?

23 A. Correct.

24 Q. Now, you're assuming that Anadarko made
25 its decision to write down Shenandoah at least in 16:19:23

1 part based on Shen 6 results; correct?

2 A. That is correct.

3 Q. And if they had decided already, prior to
4 the results of Shen 6, would that change your
5 opinion? 16:19:37

6 MR. GRUENSTEIN: Objection.

7 THE WITNESS: I'm not aware that any such
8 decision was ever made.

9 BY MS. JENSEN:

10 Q. Right. So -- so that's an assumption 16:19:48
11 you're making. So if your assumption was faulty,
12 your opinion would also be incorrect; right?

13 MR. GRUENSTEIN: Objection.

14 THE WITNESS: I'm sorry, again?

15 BY MS. JENSEN: 16:19:57

16 Q. So --

17 MR. GRUENSTEIN: I said objection, but you
18 can answer.

19 THE WITNESS: Oh, okay. If they had made
20 that decision prior to the drilling of Shen 6, then 16:20:04
21 their statements about it being dependent on Shen 6
22 would have been inaccurate, so yes.

23 BY MS. JENSEN:

24 Q. You also opine that investors understood
25 in late 2016 and early 2017, as Anadarko discussed 16:20:19

1 potential development solutions for Shenandoah, that
2 the prospect would not be developed in the existing
3 economic environment; correct?

4 A. Yes.

5 Q. And what does the "existing economic 16:20:37
6 environment" mean?

7 A. That then prevailing estimates of future
8 oil and gas prices and the then expected costs of
9 development.

10 Q. Okay. So the then prevailing estimates of 16:20:56
11 future oil and gas prices, are you referring -- what
12 timeframe are you referring to?

13 A. I -- I didn't specify a time period.

14 It's, you know, intermediate to longer term.

15 You're -- you -- you're forced to make a go/no-go 16:21:17
16 decision based on estimates, of course, you don't
17 have a crystal ball as to oil and gas prices. They
18 were doing a feed study to try to bring down the
19 cost of development, but there are multiple
20 variables, and you've got to do it based on the best 16:21:41
21 available information recognizing it's incomplete at
22 that time.

23 Q. So intermediate to long term; right, and
24 as you testified earlier, Shenandoah was not
25 expected to be online prior to 2019; correct? 16:21:49

1 A. That is correct, yes.

2 Q. And the 2019 prices at the time were
3 estimated to be \$80 a barrel; correct?

4 A. There was a wide range depending on who
5 you -- who you talked to. And as oil prices trended 16:22:06
6 downward and during the class period, which they
7 did, I mean, they -- they troughed in about the
8 middle of the class period, people's future
9 expectations came down somewhat. So yeah, it was --
10 it was a range. 16:22:22

11 Q. But the Brent oil pricing for 2019 was \$80
12 a barrel; correct?

13 A. I don't have that in front of me, but --

14 Q. If that's --

15 A. -- order of magnitude. 16:22:33

16 Q. Yeah, if that's what's in your report, you
17 have no reason to dispute it?

18 A. No, I don't.

19 Q. Okay.

20 A. I am aware that during this same time 16:22:41
21 period, Wood Mac, which is a fairly highly regarded
22 company, thought the break even for Shenandoah was
23 closer to \$100 -- \$100 a barrel.

24 Q. And what time period are you talking
25 about? 16:22:57

1 A. I think the Wood Mac report, if my
2 recollection is correct, was middle of 2016.

3 Q. Okay. So but that was also a -- an
4 opinion; correct?

5 A. That -- that is correct. Of course, yeah. 16:23:13

6 Q. And opinions vary; correct?

7 A. Yes, they do.

8 Q. And, in fact, the company never said it
9 would take \$100 a barrel to develop Shen, did they?

10 A. No. My recollection is the company said 16:23:30
11 it couldn't state a price at which it would proceed.
12 There were still too many variables.

13 Q. And the company also said in September of
14 2016 that they didn't need material commodity price
15 improvement to make money with the GOM for 16:23:47
16 Shenandoah; correct?

17 A. At what -- I'm sorry, what date again?

18 Q. It was September 2016.

19 A. So before 5 or 6 were drilled, or before 5
20 or 6 were known; correct? 16:24:07

21 Q. Before -- I would say that's before 6 is
22 known.

23 A. Before 6 is known, yeah.

24 Q. Yeah.

25 A. So I believe they made that statement, but 16:24:13

1 they also said that they needed 6 before they could
2 proceed, independent of pricing.

3 Q. So in -- in forming your opinion about the
4 existing economic environment, you -- you don't cite
5 any investors, that they understood it that way; 16:24:42
6 correct?

7 A. That they understood it what way? Excuse
8 me, can you elaborate?

9 Q. That -- that Anadarko would not develop
10 Shenandoah in the existing economic environment. 16:24:50

11 A. Did I cite any investors?

12 Q. Right.

13 A. Well, I would -- I would call Wood Mac an
14 investor, and they -- they said it would take \$100
15 oil. I don't think -- Anadarko did not make that 16:25:04
16 statement, but there were other people that I -- I
17 recall JPMorgan, I think, saying this was breakeven
18 at 60. So -- so there was a range of people giving
19 different prices at which this would clear the
20 market. 16:25:17

21 Anadarko did not, but some investors did
22 or some analysts did.

23 Q. So you're not saying all investors
24 understood that; right?

25 A. I've never said anything about all 16:25:28

1 investors. No, that's correct.

2 Q. When you said "Wood Mac," do you mean Wood
3 Mackenzie?

4 A. I'm sorry, yes, Wood Mackenzie.

5 Q. Can you point me to the paragraph where 16:25:49
6 you cite that report?

7 A. Not without doing some hunting, I
8 couldn't. I remember -- I remember the report but
9 exactly what page it appears on, let me look for a
10 minute. 16:26:08

11 I'm -- I'm still hunting. Excuse me.

12 I'm getting there.

13 I'm looking at 142, but I've got a little
14 mismatch in my notes here. Hold on.

15 Q. Sorry, what notes? 16:28:03

16 A. Well, I'm looking at -- at my Exhibit B.

17 Q. Mm-hmm.

18 A. I'm just trying to find what page Wood Mac
19 appears on.

20 My Exhibit B doesn't cite by -- does not 16:28:52
21 cross reference to footnote number. That's what I'm
22 trying to find.

23 The Wood Mac reports that I referred to
24 are Items 136 through 142 in Exhibit B, but I don't
25 have -- global breakeven analysis and cost curves 16:29:10

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1 pre-FID private. And -- and I don't -- it doesn't
2 tie to the footnotes. I'm sorry.

3 Do you want to go off for a minute while I
4 look for it, because I --

5 Q. Yeah, that's fine. Let's go off the 16:29:57
6 record.

7 THE VIDEOGRAPHER: We're off the record.
8 It's 4:29 p.m.

9 (Off the record.)

10 THE VIDEOGRAPHER: We're back on the 16:32:36
11 record. It's 4:32 p.m.

12 THE WITNESS: Okay. The first Wood Mac
13 report I cited appears on page 144. This would be
14 at 290 c. Wood Mac entitled, "Pre-FID Oil Projects
15 in This Litigation." 16:33:17

16 "[I]f prices remain around \$50/bbl, most
17 major projects are at risk of deferral or
18 cancellation without further cost deflation. That
19 same slide included a graphic listing Shenandoah as
20 having" -- 16:33:40

21 THE COURT REPORTER: Can you slow down,
22 please, sir.

23 THE WITNESS: I'm sorry.

24 "That same slide included a graphic
25 listing Shenandoah as having a start-up date around 16:33:43

1 2021, with breakeven pricing hovering around 90 to
2 \$100/bbl." [As read]

3 Second citation is the Wood Mac report
4 from 2017. This appears on page 154. Actually, 153
5 and 154. 16:34:14

6 And, again, "In January 2017, Wood
7 Mackenzie indicated they believed the region is
8 going to pause in the near future, wait for the cost
9 structure and long-term view on oil prices to
10 stabilize before embarking on large, capex-heavy 16:34:46
11 projects again. Shenandoah has thus far 'produced
12 encouraging results' but it 'assumed' that it would
13 'undergo additional appraisal drilling in 2017 prior
14 to receiving FID' and cautioned that 'negative
15 results may result in a bleaker outlook' for 16:35:06
16 Shenandoah and the 'Inboard Lower Tertiary as a
17 whole.'" [As read]

18 That's page 154, paragraph 310.

19 BY MS. JENSEN:

20 Q. Okay. Thank you. 16:35:21

21 Okay. So, let's take this piece by piece.
22 So July 2016, that report with its breakeven was one
23 investor's opinion about the breakeven price;
24 correct?

25 A. That is correct. 16:35:40

1 Q. And other investor -- investor's discrete;
2 correct?

3 A. And other -- yeah, there's a range of
4 expectations from different investors; that's
5 correct.

16:35:56

6 Q. And, in fact, another report that you
7 cited in your report from Deutsche Bank had
8 Shenandoah break even at \$46; correct?

9 A. That's correct. Yep.

10 Q. So do you credit one of their opinions
11 more than the other?

16:36:12

12 A. No. I'm simply saying that that
13 uncertainty adds to risk. Uncertainty as to future
14 product prices and uncertainty as to at what price
15 this gets sanctioned.

16:36:46

16 Q. And the -- the company hadn't said what
17 that price would be?

18 A. That is correct. They had not said.

19 Q. Okay. Now, turning to paragraph 310, you
20 read from a sentence about Shenandoah, and its
21 assumption as of January 2017 was that it would have
22 additional appraisal drilling in 2017 prior to
23 receiving FID; correct?

16:37:04

24 A. That is correct.

25 Q. And is that a reference to Shenandoah 6?

16:37:22

1 A. Yes, it is.

2 Q. Okay. Now, Shenandoah Saba [verbatim] had
3 also said there may be a Shen 7; correct?

4 A. I don't recall that.

5 Q. You have no reason to dispute that; right? 16:37:38

6 A. I don't. I don't recall it though.

7 Q. Okay. But the company never said Shen 6
8 was the end of the line, did it?

9 A. It said continuation would be dependent on
10 5 and then on 6. I never heard mention of 7, so no. 16:37:55

11 Q. In other words, it -- it didn't say that
12 was going to be the end of its appraisal program?

13 A. That -- that is correct.

14 Q. The Mac -- I'm sorry, Wood Mac report that
15 you were just quoting from, it talks about if there 16:38:27
16 were negative results, then it would be a bleak --
17 bleaker outlook; is that right?

18 A. That's what Wood Mac said, that's correct,
19 yeah.

20 Q. As in it would be more negative than it 16:38:43
21 was as that time?

22 A. That's how I interpret "bleaker," yes.

23 Q. Okay. Now, Anadarko never told the market
24 it had no intentions of developing Shenandoah before
25 the write-down; correct? 16:39:02

1 A. It said it needed furtherance of a once --
2 flipsides [verbatim] of the coin, it said it needed
3 additional information from 6 before it could move
4 forward. The inverse of that was, you know, if they
5 didn't get information, 6 wouldn't be moving forward 16:39:20
6 yet.

7 Q. Well, the company also mentioned the
8 possible Shenandoah 7; correct?

9 A. As I said, I don't recall that.

10 Q. And you have no reason to dispute that? 16:39:28

11 A. I do not.

12 MR. GRUENSTEIN: Objection.

13 BY MS. JENSEN:

14 Q. And if that's true, then the inference is
15 not there; correct? 16:39:36

16 A. Well, that was -- that was dependent on a
17 qualitative assessment, a qualitative and
18 quantitative assessment of 6, which we now know was
19 a dry hole.

20 Q. That's not exactly my question though. If 16:39:54
21 the company --

22 A. Okay, restate it, if you would, please.

23 Q. Sure, of course.

24 So if the company said that there may be a
25 Shen 7, then there is no inference to be taken that 16:40:02

1 Shen 6 was end of the line?

2 A. I'll agree with that.

3 Q. Are the only choices for an oil company to
4 develop an oil field or a write-off entirely?

5 A. There -- there's something of a ticking 16:40:17
6 clock, if you will. You can't -- you can't suspend
7 activities forever. There -- there are accounting
8 issues. There are also lease expiration issues.

9 Q. A company could also sell its working
10 interest; right? 16:40:36

11 A. Yes, yes, of course it could, yes.

12 Q. And, in fact, one of the Shen partners did
13 just that; right?

14 A. Marathon exited and Anadarko exercised its
15 preference, that's correct. 16:40:48

16 Q. And so, it made money on Shenandoah
17 without developing it; correct?

18 A. I can't tell you if that's correct or not.
19 I don't know what they received versus what they had
20 expended. They -- my recollection is, Marathon sold 16:41:03
21 in July of '16, so they would have sold after Shen
22 4, but before Shen 5, so I'm not sure what they had
23 expensed and what they received. So I don't know
24 whether they made money or not.

25 Q. You'll -- you'll agree, though, that 16:41:21

1 whatever that number was, it was north of 0?

2 A. Presumably.

3 Q. You think they sold it for less than \$0?

4 A. I don't think -- no. I don't -- no. Yes,

5 I -- I agree it's more than 0, I don't know what it 16:41:32
6 was then.

7 Q. Okay, okay.

8 A. Point taken.

9 Q. In fact, there's -- your report talks
10 about other ways of monetizing -- monetizing assets; 16:41:41
11 right?

12 A. That's correct, yeah.

13 Q. Okay. So, for example, paragraph 10 talks
14 about asset sale -- sales, paragraph 140 talks about
15 different options that companies have; right? 16:41:52

16 A. Yeah, yeah, throughout this period,
17 Anadarko at one point bought all of McMoRan's
18 interest in the Gulf of Mexico. They sold other
19 interests. So that's sort of dynamic portfolio
20 optimization. At the right price, everything is for 16:42:12
21 sale. At the right price, you want to buy
22 everything.

23 Q. That's right. So in other words,
24 investors didn't think it was develop or bust;
25 right? 16:42:21

1 A. That is correct.

2 Q. Okay. In your report, you opine that
3 investors understood before Anadarko's alleged
4 corrective disclosure that Shenandoah 6 was wet; is
5 that right? 16:43:02

6 A. That's correct.

7 Q. The company had told the market that it
8 was sidetracking Shen 6; right?

9 A. That's right.

10 Q. And the market didn't know the results of 16:43:08
11 Shen 6's sidetrack before the corrective disclosure
12 by Anadarko; correct?

13 A. That's my recollection.

14 Q. Likewise, Anadarko's decision to suspend
15 Shenandoah appraisal was not known before the 16:43:29
16 corrective disclosure; correct?

17 A. That is correct.

18 Q. And the write-down in the amount of
19 \$902 million was also not disclosed to the market
20 prior to the corrective disclosure; correct? 16:43:44

21 A. That is correct.

22 Q. Now, in the wake of the corrective
23 disclosure, some so- -- sophisticated investors said
24 that the news was surprising; correct?

25 A. Some said it was not surprising, and some 16:44:01

1 were surprised.

2 Q. So in answer to my question, some
3 sophisticated investors said they were surprised;
4 correct?

5 A. I -- I -- I suspect that's true. I don't 16:44:17
6 recall any of those statements. I recall people
7 saying it's disappointing but not surprising. But
8 I -- I --

9 Q. If -- if you had -- if you had reviewed
10 documents where sophisticated investors said it was 16:44:33
11 surprising, would that change your opinion?

12 MR. GRUENSTEIN: Objection.

13 THE WITNESS: An attentive investor to my
14 mind would have heard -- go back a minute.

15 The discovery well was a discovery well. 16:44:53
16 The second well was the most successful well to
17 date. So we had two good wells, then a dry hole.
18 Then 4 is a so-so well, 5 is a good well, and 6 is a
19 dry hole.

20 So if one followed the chronology here, I 16:45:08
21 don't think people should have been shocked at the
22 ultimate decision.

23 BY MS. JENSEN:

24 Q. And that's -- that's just your
25 interpretation; correct? 16:45:18

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1 A. That -- that is correct. That's my
2 interpretation.

3 Q. In fact, class representatives' investment
4 manager Lazard was surprised; right?

5 A. I -- I -- I don't recall it, but I'm not 16:45:32
6 -- I -- I -- I don't dispute it, no.

7 Q. You're not surprised to hear that Lazard
8 was surprised, are you?

9 A. It -- it would not shock me to hear that
10 one or more investment managers did not expect this 16:45:45
11 write-off to happen, no. That's --

12 Q. Not just any investment managers, the
13 investment managers for the class representatives in
14 this case.

15 A. I'd say any investment manager, because 16:45:57
16 I -- I didn't -- as I said, since I didn't know the
17 class representatives, I did not know that Lazard
18 represented a class representative -- or was an
19 asset manager for a class. Since I didn't know
20 that, I can just say that Lazard -- am I shocked 16:46:11
21 that Lazard was surprised, no, that happens.

22 As we -- as we know from subsequent
23 investments, Beacon and Navitas are drilling as we
24 speak. So there are people that --

25 (Simultaneous speaking.) 16:46:28

1 (Interruption in audio/video.)

2 THE COURT REPORTER: Can you say that
3 again? "As we know from subsequent investments"?

4 THE WITNESS: -- subsequent developments,
5 Beacon and Navitas are developing Shenandoah as we 16:46:32
6 speak.

7 And a final investment decision for
8 \$1.8 billion was made last August, so there is --
9 there are smart oil and gas investors who think that
10 there is still very significant potential here. 16:46:45

11 BY MS. JENSEN:

12 Q. And did at the time; right?

13 A. No, not -- I would not necessarily say
14 they did at the time.

15 Q. Okay. Let's -- 16:46:56

16 A. But at the time we did not have the
17 current drill ship that's working there. We did not
18 have the current oil prices. So a number of factors
19 have changed since the decision in May of 2017.

20 Q. Okay. Well, let's -- let's get to what's 16:47:08
21 happening at Shenandoah now. A little bit later,
22 that's not --

23 A. Fine. I'm -- I'm sorry. I didn't mean to
24 jump the gun.

25 Q. You're -- you're -- you're not -- yeah, 16:47:27

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1 you're -- you're going on a rant about something I'm
2 not asking you about.

3 A. Fine. Fine.

4 Q. So let's -- let's look at Exhibit 514,
5 which, for the record, is a document with the Bates 16:47:36
6 stamp L00000080.

7 (Keller Deposition Exhibit 514 was marked
8 electronically.)

9 BY MS. JENSEN:

10 Q. Can you see this document? 16:47:49

11 A. I'm opening it now. Hold on.

12 Yes, I've opened it now.

13 Q. Okay. And if you go down the page, below
14 the "COMMENTS" --

15 A. Yes, I see it. 16:48:13

16 Q. Yeah.

17 -- so the third bullet there, could you
18 read that into the record, please.

19 A. "Deepwater Gulf of Mexico has shifted from
20 being a positive to a problem. The decision to 16:48:26
21 impair Shenandoah (to the tune of \$1 billion) was
22 surprising given that APC had already drilled five
23 appraisal wells. While APC has not yet decided to
24 relinquish the leases, it appears that management
25 has little confidence that the project will move 16:48:44

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1 forward. This in turns removes an expected source
2 of future production (and cash flow), and it raises
3 questions about APC's ability to find new tie-back
4 developments for its significant infrastructure in
5 the Gulf. Unexpectedly, CEO Al Walker opined on the 16:49:02
6 call that 'at' 40 to 60 -- excuse me, "'50 to 60
7 dollar oil, the Gulf of'" -- "'Gulf of Mexico
8 development is a challenge.' Worrying given that it
9 is sub-50 today,'" end of paragraph. [As read]

10 Q. Okay. Thank you. 16:49:22

11 So, again, this -- this is Lazard that's
12 writing this; correct?

13 A. That is correct.

14 Q. No reason to doubt that that is the class
15 representatives' investment manager? 16:49:29

16 A. As you say.

17 Q. And no reason to dispute that this was the
18 class representatives' investment manager's reaction
19 after the write-off of --

20 A. No. I -- I've -- I've just read it, yep. 16:49:41

21 Q. Okay. Other analysts that you cite in
22 your report were also surprised by the news of the
23 write-off; correct?

24 A. It -- it was disappointing news, but I
25 think they were cautioned in this direction by the 16:50:00

1 statements made after 4 and after 5, that they
2 needed additional drilling, that it was dependent on
3 6, and 6 was dry. So that certainly was a -- a bad
4 data point in a deteriorating environment.

5 MS. JENSEN: Okay. I'm going to move to 16:50:15
6 strike as nonresponsive.

7 BY MS. JENSEN:

8 Q. You are aware --

9 A. Fine.

10 Q. -- that other analysts also? 16:50:19

11 A. Yes.

12 Q. -- were surprised?

13 (Simultaneous speaking.)

14 (Interruption in audio/video.)

15 THE COURT REPORTER: I'm sorry. One 16:50:22
16 second.

17 THE WITNESS: Some other analysts were
18 surprised.

19 BY MS. JENSEN:

20 Q. Including Wolfe Research? 16:50:27

21 A. I don't recall Wolfe specifically, but I
22 do recall other analysts did not expect this
23 write-down.

24 Q. And you didn't cite them in your report;
25 correct? 16:50:39

1 A. I didn't cite everything in my report,
2 that's correct.

3 Q. Well, these ones went against your
4 opinion; correct?

5 MR. GRUENSTEIN: Objection. 16:50:48

6 BY MS. JENSEN:

7 Q. You didn't cite these analysts who
8 disagreed with your opinion; correct?

9 MR. GRUENSTEIN: Objection.

10 THE WITNESS: I believe the decision that 16:50:56
11 Anadarko made was based on the facts known at the
12 time. So I -- again, I -- I mean, it -- did other
13 people have a different opinion, yes.

14 The fact that someone else is taking over
15 the lease just shows you that there is a current 16:51:18
16 belief that this is a -- a valuable asset.

17 BY MS. JENSEN:

18 Q. And so you just disagree with them;
19 correct?

20 MR. GRUENSTEIN: Objection. 16:51:29

21 THE WITNESS: I stated elsewhere in the
22 report that the decision to proceed is a function of
23 not just any individual prospect, but other
24 opportunities available to the investors, so-called
25 high grading of a portfolio and a risk appetite. 16:51:48

1 So in a capital constrained world, you
2 might have a resource that some people find valuable
3 and a resource that you simply feel you've got other
4 opportunities that are economically more attractive.

5 MS. JENSEN: So, again, nonresponsive. 16:52:09

6 BY MS. JENSEN:

7 Q. So Wolfe Re- -- Research, for example,
8 they found the Shenandoah write-down to be a
9 negative surprise -- surprise, and -- and you just
10 disagree with them; right? 16:52:21

11 MR. GRUENSTEIN: Objection. Compound.

12 THE WITNESS: One investor disagreed
13 with that -- if -- if you're telling me that that
14 was Wolfe's opinion, yes. That -- that one
15 encountered Anadarko and what a number of other 16:52:38
16 people felt [verbatim].

17 BY MS. JENSEN:

18 Q. And so you just disagree with Wolfe;
19 correct?

20 MR. GRUENSTEIN: Objection. 16:52:43

21 BY MS. JENSEN:

22 Q. It's just a difference of opinion; right?

23 A. That's fine, yes.

24 Q. So since there's differing opinions on
25 this, isn't the best way to determine the reaction 16:52:58

1 to the corrective disclosure an event study of the
2 stock decline?

3 MR. GRUENSTEIN: Objection.

4 THE WITNESS: That's one approach and
5 might be the preferred approach if this was a -- a 16:53:13
6 very significant part of Anadarko's operations,
7 which it was not.

8 BY MS. JENSEN:

9 Q. You didn't perform an event study --

10 A. I did not. I did not. 16:53:25

11 Q. Now, I think you were eager to mention
12 Navitas earlier.

13 Navitas was not involved until after the
14 class period; correct?

15 A. That is correct. 16:53:46

16 Q. And when did Navitas become a partner?

17 A. I believe that the Beacon, which is a
18 Blackstone vehicle, Beacon and Navitas I believe
19 became involved in 2018 or 2019. I'd have to
20 refresh my memory of the exact date. 16:54:06

21 Q. And Navitas is not the operator; correct?

22 A. They may have assumed -- initially I
23 believe Beacon Off- -- Offshore was the operator.
24 Navitas may have assumed operatorship. I -- I --
25 I'd -- I'd have to refresh my memory. 16:54:20

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1 Q. Isn't Beacon the operator?

2 A. Beacon was the operator, and I think
3 Navitas acquired -- Blackstone had several
4 investment vehicles in this asset.

5 And my recollection, without going back to 16:54:32
6 notes not in my report, is that Navitas subsequently
7 bought out one of the Blackstone partnerships and
8 has a bigger working interest in Beacon now.

9 So I'd -- I'd have to confirm who the
10 current operator is. I think it was Navitas that 16:54:52
11 made the FID.

12 Q. Well, paragraph 43 says that Beacon is the
13 current operator.

14 Do you --

15 A. Okay. 16:54:57

16 Q. -- disagree with your report?

17 A. No. No, I -- I don't disagree, but --
18 yeah. Okay. Fine.

19 Q. Now, in your report you only cite
20 documents from Navitas; correct? 16:55:05

21 A. If -- if -- again, I'm not looking at that
22 particular paragraph. That may be true. You know,
23 they're all partners in the same well.

24 Q. But -- but you only cited documents from
25 Navitas even though there is multiple partners; 16:55:24

1 correct?

2 A. I -- I -- I believe that's correct, yes.

3 Q. And you only cite investor presentations;
4 right?

5 A. I -- I can't recall exactly what I cited. 16:55:33
6 I've looked in the trade press and in trade
7 periodicals about -- to -- to follow developments.
8 Obviously this is well past the class period, so
9 I've just been keeping tabs on what's happening at
10 Shenandoah. 16:55:51

11 Q. I'm just looking at your -- your notes
12 here. Do you have any reason to dispute that you
13 only cited investor --

14 A. No, I -- I don't know if --
15 (Simultaneous speaking.) 16:55:59
16 (Interruption in audio/video.)

17 THE COURT REPORTER: I'm sorry. Excuse
18 me. I didn't get the rest of the question.

19 BY MS. JENSEN:

20 Q. -- investor presentations. 16:56:03

21 A. I have no reason to -- to dispute that,
22 no.

23 Q. Okay. In other words, that's Navitas's
24 dog-and-pony show about Shenandoah to potential
25 investors and investors; correct? 16:56:19

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1 MR. GRUENSTEIN: Objection.

2 THE WITNESS: I don't know that it was to
3 potential investors. I -- I couldn't tell you right
4 now who the audience was of that presentation.

5 BY MS. JENSEN: 16:56:27

6 Q. But they are entitled "Investor Con-" --
7 "Presentations"; right?

8 A. Yes. Yeah.

9 Q. You don't cite any internal documents from
10 Navitas? 16:56:35

11 A. No. I've -- I've never met the Navitas
12 people.

13 Q. Right.

14 And so you don't know what they internally
15 think about Shenandoah; correct? 16:56:41

16 A. I know that they're committing capital to
17 it, so that gives me a -- a -- a sense of what they
18 think about it.

19 Q. And Navitas isn't traded on the New York
20 Stock Exchange; correct? 16:56:55

21 A. No. It's an Israeli company.

22 Q. And Israeli companies aren't subject to
23 the same disclosure requirements; correct?

24 MR. GRUENSTEIN: Objection.

25 THE WITNESS: I -- I don't have spec- -- 16:57:03

1 specific knowledge about Israeli disclosure
2 requirements, no.

3 BY MS. JENSEN:

4 Q. You're not an expert in Israeli disclosure
5 obligations? 16:57:12

6 A. I have to admit I'm not.

7 Q. Okay.

8 MS. JENSEN: Okay. Let's go ahead and
9 take a quick break.

10 THE VIDEOGRAPHER: Okay. Off the record. 16:57:18
11 It's 4:57 p.m.

12 (Short recess taken.)

13 THE VIDEOGRAPHER: We're back on the
14 record. It's 5:06 p.m.

15 MS. JENSEN: Okay. Mr. Keller, I have no 17:06:23
16 more questions for you today.

17 THE WITNESS: Oh, you kept me waiting
18 there.

19 MS. JENSEN: I did. I kept you in
20 suspense. We're all done now. 17:06:32

21 THE WITNESS: Okay.

22 MR. GRUENSTEIN: Okay. Nothing from me.
23 Let's go off the record.

24 Thank you.

25 THE VIDEOGRAPHER: Okay. Off the record. 17:06:37

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1 It's 5:06 p.m.

2 (Proceedings concluded, 5:06 p.m., on
3 January 17, 2023.)

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JURAT

I, PETER KELLER, do hereby certify under penalty of perjury that I have read the foregoing transcript of my deposition taken remotely via videoconference on Tuesday, January 17, 2023; that I have made such corrections as appear noted herein in ink, initialed by me; that my testimony as contained herein, as corrected, is true and correct.

Dated this _____ day of _____ 2023, at

_____.

PETER KELLER

CERTIFICATE OF REPORTER

I, Hanna Kim, a Certified Shorthand Reporter, do hereby certify:

That prior to being examined, the witness in the foregoing proceedings was by me duly sworn to testify to the truth, the whole truth, and nothing but the truth;

That said proceedings were taken before me at the time and place therein set forth remotely via videoconference and were taken down by me in shorthand and thereafter transcribed into typewriting under my direction and supervision;

I further certify that I am neither counsel for, nor related to, any party to said proceedings, not in anywise interested in the outcome thereof.

Further, that if the foregoing pertains to the original transcript of a deposition in a federal case, before completion of the proceedings, review of the transcript [] was [x] was not requested.

In witness whereof, I have hereunto subscribed my name.

Dated: 1/20/23



Hanna Kim

CLR, CSR No. 13083